

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

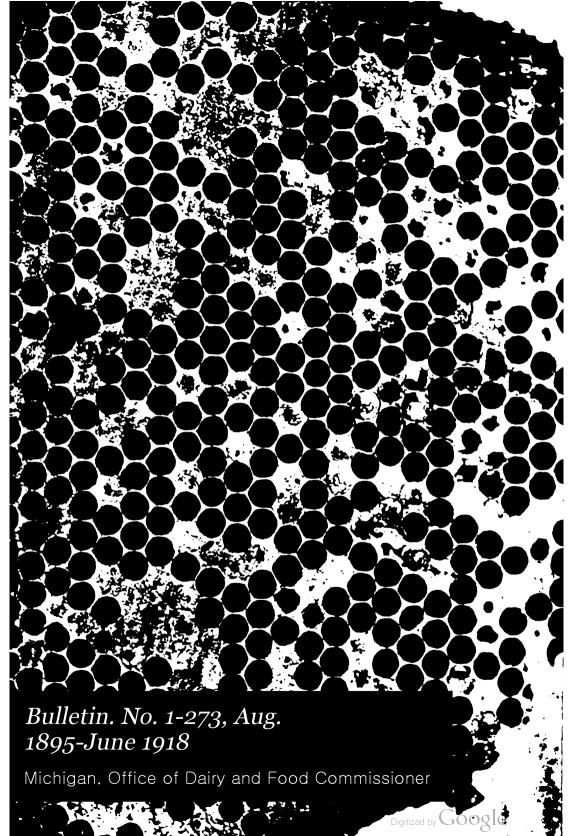
Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

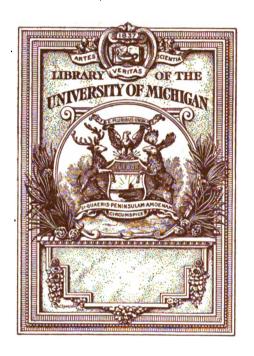
We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + Refrain from automated querying Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/







91

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

1902 WYNKOOP HALLENBECK CRAWFORD CO. OF LANSING, MICH. STATE PRINTERS

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

W. B. SNOW, -	•	-		-	-		-	-	-	Commissioner
GEO. H. BUSSEY,	-		-	-		-		-	DEPU	TY COMMISSIONES
R. E. DOOLITTLE.		_		-	_		_	_	_	STATE ANALYST

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1901.

Cases commenced since said date		56 56 41
CASE	S DISPOSED OF.	
Before Examining Magistrates 38	{ Defendants bound over to trial courts } Defendants discharged on examination	33 0
In Trial Courts 31	\ Defendants convicted\ \ Defendants acquitted	30 1
Classes pending February 1 1909	·	40

PROCEEDINGS HAD DURING THE MONTH OF JANUARY.

Cmplaint was made January 9 in justice court of city of Petoskey against Adolph Fotchman of Petoskey, charged with selling colored oleomargarine. Examination was held January 10 and defendant bound over to the circuit court for the county of Emmet for trial. January 16, case continued until September term of court.

Complaint was made January 10 in justice court of city of Holland against Cornelius M. Phernambucq of Grand Haven, charged with selling colored oleomargarine. Defendant waived examination and was bound over to the circuit court for the county of Ottawa for trial. January 14, case put over to March term of court.

Complaint was made January 11 in justice court of city of Grand Haven against John M. Cook of Grand Haven, charged with selling colored oleomargarine. January 11, defendant waived examination and was bound over to the circuit court for the county of Ottawa for trial. January 14, case put over to March term of court.

Complaint was made January 11 in recorder's court of city of Cadillac against Frank Johnson of Cadillac, charged with selling colored oleomargarine. January 11, examination was held and defendant bound over to the circuit court for the county of Wexford for trial.

Digitized by Google

56

Complaint was made January 11 in recorder's court of city of Cadillac against E. G. Snider & Co. of Cadillac, charged with selling colored oleomargarine. January 11, examination was held and defendant bound over to the circuit court for the county of Wexford for trial.

Complaint was made January 11 in justice court of city of Traverse City against Enterprise Grocery Co. of Traverse City, charged with selling colored oleomargarine. January 13, examination held and defendant bound over to the circuit court for the county of Grand Traverse for trial.

Complaint was made January 13 in justice court of city of West Bay City against Herman Rapp of West Bay City, charged with selling colored oleomargarine. Defendant waived examination and was bound over to the circuit court for the county of Bay for trial.

Complaint was made January 15 in justice court of city of St. Joseph against Charles Freund of St. Joseph, charged with selling colored oleomargarine. January 15, defendant waived examination and was bound over to the circuit court for the county of Berrien for trial.

Complaint was made January 17 in justice court of the city of Dowagiac against Fred W. Pugsley of Dowagiac, charged with selling colored oleomargarine. January 31, examination begun, adjourned to February 14.

In the case pending in the circuit court for the county of Emmet against George W. Rotter of Alanson, charged with selling colored oleomargarine, January 16, defendant convicted; stay granted pending an appeal to the supreme court.

In the case pending in the circuit court for the county of Emmet against A. B. Thompson of Petoskey, charged with selling colored oleomargarine, January 16, case continued.

In the case pending in the circuit court for the county of Emmet against Wm. A. Major of Petoskey, charged with selling colored oleomargarine, January 16, case continued.

In the case pending in the circuit court for the county of Emmet against Colby-Hinkley Co. of Alanson, charged with selling colored oleomargarine, January 16, case put over to next term of court.

In the case pending in the circuit court for the county of St. Joseph against D. J. Kelly, agent for Whitman Bros., South Bend, Ind., charged with selling adulterated jelly, January 20, case put over to next term of court.

In the case pending in justice court of city of Bellaire against Charles Weiffenbach of Bellaire, charged with selling colored oleomargarine, examination was held January 9 and defendant bound over to the circuit court for the county of Antrim for trial.

In the case pending in justice court of city of Mancelona against Antrim Iron Co. of Antrim, charged with selling colored oleomargarine, examination was held January 10 and defendant bound over to the circuit court for the county of Antrim for trial.

In the case pending in police court of city of Bay City against Thomas D. Ryan, representing Bennett, Sloan & Co. of New York, charged with selling adulterated mustard, January 8, examination adjourned owing to illness of defendant.

In the case pending in justice court of city of Battle Creek against Will H. Hamilton of Battle Creek, charged with selling colored oleomargarine, examination was concluded on January 3 and defendant bound over to the circuit court for the county of Calhoun for trial.

In the case pending in the circuit court for the county of Muskegon against Daniel Christie of Muskegon, charged with selling colored oleomargarine, January 30, defendant convicted; stay of thirty days granted pending an appeal to the supreme court.

In the case pending in the circuit court for the county of Muskegon against John W. Spoelman of Muskegon, charged with selling colored oleomargarine, January 30, case put over to next term of court.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., January 31, 1902.

Hon. W. B. Snow, Dairy and Food Commissioner:

Sir—During the month of January, 52 samples of food products have been examined, 16 being pure and 36 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

Article.	Total.	Not found adulter- ated.	Found adulter- ated.
Buckwheat flour. Butter Cheese Extracts Jelly and fruit butter Lard Molasses Mustard. Oleomargarine Salt. Syrup	8 3 2 8 9 1 6 2 11 1	6 0 1 3 1 1 1 1 0	2 3 1 5 8 0 5 1
Totals	52	16	36

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

BUCKWHEAT FLOUR.

No. U-8. Sample of "Ralston Health Buckwheat Flour" from T. H. Rule & Bro.,
Lake Linden.
Sold by Lieblein Bros., Hancock, Mich.
Producer, Topeka Milling Co., Topeka, Kan.
Buckwheat flour
Wheat and corn
Leavening and salt
Contains wheat and corn flour.
No. U-10. Sample of "King's Quick-Rising Buckwheat Flour" from Poull Mercantile Co., Lake Linden.
Sold by Stone, Orlean & Wells, Duluth, Minn.
Producer, King's Cereal Co., Chicago, Ill.
Buckwheat flour
Wheat and corn
Leavening and salt
Contains wheat and corn.
BUTTER.
No. K-305. Sample of butter ("Wisconsin Dairy" brand) from A. Danforth, St. Joseph.
Sold by Butzbach & Schaus, Benton Harbor, Mich. Sample is process butter.
No. L-209. Sample of butter from Mike Litney, Traverse City.
Producer, Mr. Irish, Norrisville, Mich.

No. U-16. Sample of butter from Stannard Bros., Greenland.

Sold by I. E. Swift, Chicago, Ill.

Producer, I. E. Swift, Chicago, Ill.

Sample is process butter.

Sample is rancid goods.

No. U-11. Sample of "Royal Luncheon Cheese" from T. H. Rule & Bro., Lake Linden. Producer, Horton Cato Mfg. Co., Detroit, Mich. Sample is rancid goods.

CHEESE.

EXTRACTS.

No. L-204. Sample of raspberry extract from J. W. Jackso	n, Trav	erse City.	
Sold by Chapman & Smith Co., Chicago, Ill.			
Producer, Chapman & Smith Co., Chicago, Ill.			
Solids	1.77	per cent.	
Glycerine		-	
Alcohol			
Compound ether			
Coloring matter			
An artificial preparation.			
NT T 000 0 1 4 4 1 1 4 4 T TT T 1	-	0 11	
No. L-205. Sample of strawberry extract from J. W. Jack	son, Tr	averse City.	
Sold by Chapman & Smith Co., Chicago, Ill.			
Solids		per cent.	
Glycerine			
Alcohol		x	
Compound ether			
An artificial preparation.			
No. L-207. Sample of pineapple extract from J. W. Jackso	n Tree	verse City	
_ _ 	,	ciae oity.	
Sold by Chapman & Smith Co., Chicago, Ill.			
Producer, Chapman & Smith Co., Chicago, Ill.	0.50		
Solids		per cent.	
Glycerine			
Compound ether			
Coloring matter		•	
An artificial preparation.			
No. L-208. Sample of banana extract from J. W. Jackson, Tr	averse	City.	
Sold by Chapman & Smith Co., Chicago, Ill.		•	
Producer, Chapman & Smith Co., Chicago, Ill.			
Solids	1 37	ner cent	
Glycerine		per cent.	
Alcohol			
Compound ether			
Coloring matter			
An artificial preparation.			
	_		
No. U-14. Sample of vanilla from Stannard Bros., Greenla	ınd.		
Sold by Reid, Murdock & Co., Chicago, Ill.			
Producer, Kenwood Preserving Co., Chicago, Ill.			
Vanillin	0.301	per cent.	
Vanilla resin		to trace.	
Organic acids, gums, etc	Trace		
Color	Forei	gn.	
Contains foreign coloring matter and probably added vanil	lin.		
THE TY AND DRIVE DIMMEN			
JELLY AND FRUIT BUTTER	•		
No. K-302. Sample of "Pure Fruit Jelly, Currant" from	Ankle	& Duncan, S	št.
Joseph.		,	
Sold by Reid, Murdock & Co., Chicago, Ill.			
Producer, Reid, Murdock & Co., Chicago, Ill.			
Water	35.98	per cent.	
Ash	0.38	-""	
Reducing sugar	30.46	" " .	
-	Digitized	by Google	0
	Digitized	by Googli	-

DAIRY AND FOOD DEPARTMENT.
Polarization before inversion
No. K-304. Sample of "Imperial Strawberry Jelly" from Weber Bros., St. Joseph.
Sold by Franklin McVeagh & Co., Chicago, Ill.
Producer, Franklin McVeagh & Co., Chicago, III.
Water 45.19 per cent. Ash 0.68 " " Reducing sugar 18.75 " " Polarization before inversion +94.4 degrees. Polarization after inversion +93.0 " Color Artificial. Imitation fruit jelly artificially colored.
No. L-210. Sample of "Pure Fruit Jelly, Quince," from Imperial Tea Co., Kalamazoo.
Sold by Reid, Murdock & Co., Chicago, Ill.
Producer, Reid, Murdock & Co., Chicago, Ill.
Water 38.08 per cent. Ash 0.39 " " Reducing sugar 40.74 " " Polarization before inversion —8.0 degrees. Polarization after inversion —20.5 " Starch Present. Color Artificial. Contains starch and artificial coloring matter.
No. L-211. Sample of "Pure Fruit Jelly, Red Raspberry," from Imperial Tea Co., Kalamazoo.
Sold by Reid, Murdock & Co., Chicago, Ill.
Producer, Reid, Murdock & Co., Chicago, Ill.
Water 36.56 per cent. Ash 0.43 " " Reducing sugar 26.69 " " Polarization before inversion +17.2 degrees. Polarization after inversion -20.6 " Starch Present. Color Artificial. Contains starch and artificial coloring matter.
No. L-212. Sample of "Pure Fruit Jelly, Apple," from Imperial Tea Co., Kalamazoo. Sold by Reid, Murdock & Co., Chicago, Ill.
Producer, Reid Murdock & Co., Chicago, Ill.
Water 37.14 per cent. Ash 0.28 " " Reducing sugar 36.61 " " Polarization before inversion +5.5 degrees. Polarization after inversion -18.3 " Starch Present. Color Artificial.

Contains starch and artificial coloring matter.

10	STATE OF MICHIGAN.
No.	L-213. Sample of "Pure Fruit Jelly, Grape," from Imperial Tea Co., Kala-
	y Reid, Murdock & Co., Chicago, Ill.
Produ	cer, Reid, Murdock & Co., Chicago, Ill.
Con	Water 40.83 per cent. Ash 0.33 " " Reducing sugar 33.38 " " Polarization before inversion +2.1 degrees. Polarization after inversion -21.5 " Starch Present. Color Artificial. ttains starch and artificial coloring matter.
	U-9. Sample of grape jelly ("Banquet" brand) from T. Ginbord & Bros., Linden.
	y Rondy Peckman & Co., Chicago, Ill.
Produ	ncer, Lamon & Gohl Syrup Co., Chicago, Ill.
Not	Water 23.77 per cent. Ash 0.31 " " Reducing sugar 18.56 " " Polarization before inversion +42.4 degrees. Polarization after inversion -22.2 " Starch Present. pure grape jelly.
Produ	U-12. Sample of jelly, "quince flavor," from J. C. Corgan, Ontonagon. noer, P. J. Ritter Conserve Co., Philadelphia, Pa. Water
	MOLASSES.
	K-298. Sample of molasses ("St. Charles" brand) from D. Arnott, Grand
Rapid Sold 1	by Louisiana Syrup & Molasses Co., St. Louis, Mo.
	ncer, Louisiana Syrup & Molases Co., St. Louis, Mo.
Cor	Water 25.72 per cent. Ash 1.95 " " Reducing sugar 32.08 " " Polarization before inversion +109.6 degrees. Polarization after inversion +99.9 " stains glucose.
No. Arnot	K-299. Sample of molasses ("Myrtle Grove—New Crop" brand) from D.
Sold 1	by Louisana Syrup & Molasses Co., St. Louis, Mo.
Produ	ncer, Louisiana Syrup & Molasses Co., St. Louis Mo.
	Water 24.58 per cent. Ash 1.20 " " Reducing sugar 28.78 " " Polarization before inversion +123.4 degrees. Polarization after inversion +106.9 "
Cor	ntains glucose.

No. K-301. Sample of molasses ("Magnolia-New Crop" brand) from Rice Bros.
St. Joseph.
Sold by Louisiana Syrup & Molasses Co., St. Louis, Mo.
Producer, Louisiana Syrup & Molasses Co., St. Louis, Mo.
Water 26.63 per cent. Ash 1.90 " "
Reducing sugar 23.52 " "
Polarization before inversion+106.8 degrees.
Polarization after inversion+74.1 "
Contains glucose.
No. R-116. Sample of New Orleans molasses ("St. Charles" brand) from Kelley & Co., West Bay City.
Producer, Louisiana Syrup & Molasses Co., St. Louis, Mo.
Water 25.11 per cent.
Ash
Reducing sugar
Polarization after inversion
Contains glucose.
No. R-123. Sample of New Orleans molasses (brand "No. 117 N. O. Molasses") from A. D. Phillips, Saginaw.
Sold by Symons Bros. & Co., Saginaw, Mich.
Water
Ash
Polarization before inversion
Contains glucose.
MUSTARD.
37 T 000 C 1 -4 (D
No. K-303. Sample of "Bengal Mustard" from Ankli & Duncan, St. Joseph.
Sold by Franklin McVeagh & Co., Chicago, Ill.
Ash 6.50 per cent. Mustard
ALLOWS W

OLEOMARGARINE.

No. K-300. Sample of oleomargarine from Charles D. Hirsch, Benton Harbor. Producer, Wm. J. Moxley, Chicago, Ill.

Olcomargarine artificially colored.

Colored with turmeric.

No. L-214. Sample of oleomargarine from Enterprise Grocery Co., Traverse City. Sold by G. H. Hammond Co., Chicago, Ill.

Producer, G. H. Hammond Co., Hammond, Ind.

Oleomargarine artificially colored.

No. L-215. Sample of oleomargarine from Enterprise Grocery Co., Traverse City.

Sold by G. H. Hammond Co., Chicago, Ill.

Turmeric

Producer, G. H. Hammond Co., Hammond, Ind.

Oleomargarine artificially colored.

No. L-216. Sample of oleomargarine from H. Hurley, Kalkaska.

Producer, G. H. Hammond Co., Hammond, Ind.

Oleomargarine artificially colored.

No. L-217. Sample of oleomargarine from Enterprise Grocery Co., Traverse City. Sold by G. H. Hammond Co., Chicago, 111.

Producer, G. H. Hammond Co., Hammond, Ind.

Oleomargarine artificially colored.

No. R-114. Sample of oleomargarine from Herman Rapp, West Bay City.

Producer, G. H. Hammond Co., Hammond, Ind. Oleomargarine artificially colored.

No. S-137. Sample of oleomargarine from Gaukler Bros., Pontiac.

Producer, Wm. J. Moxley, Chicago, Ill.

Oleomargarine artificially colored.

No. S-138. Sample of oleomargarine from Michigan Produce Co., Detroit. Producer, Capitol City Dairy Co., Columbus, O.

Oleomargarine artificially colored.

No. S-139. Sample of oleomargarine from T. Horigan, Detroit.

Producer, Capitol City Dairy Co., Columbus, O.

Oleomargarine artificially colored.

No. S-140. Sample of oleomargarine from John Blessed & Son, Detroit.

Sold by Michigan Produce Co., Detroit, Mich.

Producer, G. H. Hammond Co., Hammond, Ind.

Oleomargarine artificially colored.

No. S-141. Sample of oleomargarine from J. H. Petiphren & Co., Detroit.

Producer, C. H. Friedman Chicago, Ill.

Oleomargarine artificially colored.

INSPECTIONS.

The following places were visited by the Department's inspection

force during the month of January:

Adrian, Alanson, Battle Creek, Bay City, Bellaire, Benton Harbor, Benzonia, Beulah, Cadillac, Charlotte, Detroit, Eaton Rapids, Essexville, Grand Rapids, Grass Lake, Greenland, Hastings, Jackson, Kalamazoo, Kalkaska, Lake Linden, Lansing, Mancelona, Manchester, Mass City, Norrisville, Northport, Ontonagon. Petoskey, Pontiac, Red Ridge, Rockland, Saginaw, St. Johns, St. Joseph, Saline, Sebewaing, Tecumseh, Thompsonville, Traverse City, Unionville, West Bay City, Ypsilanti.

DAIRY INSPECTIONS.

Report of dairies inspected during the month of January:

At Adrian:

- J. E. Clark—Number of cows, 21; condition, good; feed, hay, stover, ensilage, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well; uses aerator.
- J. W. Helme—Number of cows, 114 condition, good, clean; feed, hay, ensilage, bran, cotton-seed-meal; stables, clean, good; yard, dry, clean; water, well.
- Fred J. Shannon—Number of cows, 11; condition, good, dirty; feed, stover, ground corn, oats, refuse from brewery; stables, dirty, close; yard, fairly dry, clean; water, well.

At Battle Creek:

- Davis & Johnson—Number of cows, 18; condition, good; feed, hay, stover, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- G. R. Peet—Number of cows, 18; condition, good; feed, hay, corn, stover, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- Ed. Andrews—Number of cows, 12; condition, good; feed, hay, cornfodder, corn-meal, bran; stables, good; yard, dry, clean; water, well.

- M. P. Hanson—Number of cows, 15; condition, good; feed, hay, shredded corn-fodder, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- B. F. Morgan—Number of cows, 39; condition, good; feed, hay, stover, ensilage, corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- O. P. Wells—Number of cows, 14; condition, good; feed, hay, stover, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water. well.

Byron Cowles—Number of cows, 19; condition, good; fed, hay, cornfodder, bran, ground corn, oats; stables, good, clean; yard, dry, fairly clean; water, well.

Arie Cowles—Number of cows, 17; condition, good; feed, hay, stover, bran, corn, oats; stables, good, fairly clean; yard, dry, clean; water, well.

M. Minty-Number of cows, 16; condition, good, clean; feed, hay, corn-fodder, bran, corn-meal; stables, good; yard, dry, clean; water, well.

John Rolfe—Number of cows, 18; condition, good; feed, hay, stover, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.

Mrs. B. W. Adams—Number of cows, 17; condition, good; feed, hay, ensilage, corn-fodder, corn-meal, bran; stables, good, clean; yard, dry, clean; water, well.

Niles Marshall—Number of cows, 14; condition, good; feed, hay, stover, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.

- J. N. Self—Number of cows, 32; condition, good, clean; feed, hay, ensilage, corn-fodder, corn-meal, bran; stables, good; yard, dry, fairly clean; water, well.
- J. P. Reasoner—Number of cows, 20; condition, good; feed, hay, stover, bran, corn-meal; stables, good, clean; yard, dry, clean; water, well.
- A. G. Johnson—Number of cows, 12; condition, good; feed, hay, cornfodder, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.

Ora Kettle—Number of cows, 5; condition, good; feed, hay, cornfodder, bran, corn-meal; stables, fairly good, clean; yard, dry, clean; water, well.

Carl Beach—Number of cows, 39; condition, good; feed, hay, ensilage, stover, bran, corn-meal; stables, good, clean; yard, dry, clean; water. well.

- M. Austin—Number of cows, 10; condition, fair, dirty; feed, hay, 4 stover, corn-meal; stables, poor, wet, dirty; yard, bad; water, spring.
- R. Gale—Number of cows, 22; condition, good; feed, hay, ensilage, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- Austin & Reid—Number of cows, 20; condition, good; feed, hay, cornstalks, ground corn, oats; stables, good, fairly clean; yard, dry, clean: water, well; milk-house, bad.
- H. R. Kingman—Number of cows, 18; condition, good; feed, stover, middlings, bran; stables, extra good, clean; yard, dry, clean; water, well.
- E. Sanford—Number of cows, 25; condition, good; feed, ensilage, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- W. W. Sprague—Number of cows, 30; condition, good; feed, hay. ensilage, corn-fodder, bran, corn-meal, oil-meal; stables, good, clean; yard, dry, clean; water, well; uses aerator.
- J. Frahm—Number of cows, 9; condition, good; feed, hay, corn-stalks bran, corn-meal; stables, good, clean; yard, dry, clean; water, well.
- F. A. Finley—Number of cows, 14; condition, good; feed, hay, cornfodder, bran, corn-meal; stables, fair, fairly clean; yard, dry; water, well.
- Charles Smith—Number of cows, 20; condition, good; feed, hay, stover, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- H. P. Day—Number of cows, 10; condition, good; feed, hay, stover, bran, corn, oats; stables, good, clean; yard, dry, clean; water, well.
- C. Hutchinson—Number of cows, 19; condition, good; feed, hay, stover, corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- J. Ulrich—Number of cows, 10; condition, good; feed, hay, stover, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- H. T. Cary—Number of cows, 8; condition, good; feed, hay, stover, bran, ground corn, oats; stables, good, clean; yard, fair; water, well.
- W. Betterly—Number of cows, 10; condition, good; feed, hay, stover, corn-meal, bran; stables, good, clean; yard, dry, clean; water, well.
- Swift Farm—Number of cows, 22; condition, good; feed, hay, cornstalks, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.

J. P. Jones—Number of cows, 9; condition, good, clean; feed, stover hay, ground corn, oats, bran; stables, good, clean; yard, dry, fairly clean; water, well.

Daniel Eccles—Number of cows, 22; condition, good; feed, hay, ensilage, stover, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.

Johnson's Sanitarium Farm—Number of cows, 17; condition, good; feed, hay, stover, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.

- H. Hamblin—Number of cows, 19; condition, good; feed, hay, cornstalks, corn, oats, bran; stables, good, clean; yard, dry, fairly clean; water, well.
- W. Stockholm—Number of cows, 7; condition, good; feed, hay, cornfodder, ground corn, oats, bran; stables, good, clean; yard, dry, fairly clean; water, well.
- E. Latta—Number of cows. 17; condition, good; feed, hay, stover, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- N. Lockwood—Number of cows, 24; condition, fair; feed, hay, stover, ensilage, corn, oats, bran; stables, fair; yard, fair; water, well.
- I. Willis—Number of cows, 20; condition, good; feed, hay, cornfodder, ground corn, oats, bran; stables, fair, fairly clean; yard, fair; water, well.
- A. Anderson—Number of cows, 17; condition, fair; feed, hay, ensilage, stover, bran, corn, oats; stables, poor; yard, fair, fairly clean; water, well.

Goguac Lake Sanitarium—Number of cows, 25; condition, extra good, clean; feed, hay, stover, corn-fodder, corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.

- A. Rhines—Number of cows. 15; condition, good; feed, hay, cornfodder, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- S. Woodworth—Number of cows, 21; condition, good; feed, hay, ensilage, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- C. N. Christancy—Number of cows, 14; condition, good; feed, hay, corn-fodder, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.

- A. Lindsley—Number of cows, 19; condition, good; feed, hay, stover, corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- G. Wolfe—Number of cows, 9; condition, good; feed, hay, stover, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- C. A. Darling—Number of cows, 13; condition, good; feed, hay, stover, ground corn, oats, bran; stables, good, clean; yard, dry, fairly clean; water, well.
- M. Young-Number of cows, 26; condition, good; feed, hay, stover, corn-meal, bran; stables, good, fairly clean; yard, dry, clean; water, well-

John Watkins—Number of cows, 19; condition, good; feed, hay, stover, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.

- F. Smith—Number of cows, 14; condition, good; feed, hay, ensilage, corn-fodder, corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- J. P. Upton—Number of cows, 35; condition, good; feed, hay, cornfodder, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- W. T. Sackrider—Number of cows, 35; condition, good; feed, hay, ensilage, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- T. Sterling—Number of cows, 14; condition, good; feed, hay, cornfodder, ground corn, oats, bran; stables, good, fairly clean; yard, dry, clean; water, well.
- Brewer & Miller—Number of cows, 24; condition, good; feed, hay, ensilage, corn-fodder, corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- W. A. Flagg—Number of cows, 8; condition, good; feed, hay, stover, corn-meal, bran; stables, good, fairly clean; yard, dry, clean; water, well.
- B. M. Miller—Number of cows, 10; condition, good; feed, hay, stover, ground corn, oats, bran; stables, good, clean; yard, dry; water, well.

Wm. Morgan—Number of cows, 34; condition, good; feed, hay, ensilage, ground corn, oats, bran; stables, good, clean; yard, dry, fairly clean; water, well.

G. W. Betterly-Number of cows, 10; condition, good; feed, hay, stover, corn-meal, bran; stables, good, clean; yard, dry, clean; water, well.

- J. W. Johnson—Number of cows, 10; condition, good; feed, hay, cornfodder, ground corn, oats, bran; stables, good, clean; yard, dry, fairly clean; water, well.
- W. Kapley—Number of cows, 15; condition, good; fed, hay, stover, corn, oats, bran; stables, good, fairly clean; yard, dry; water, well.
- J. W. Willison—Number of cows, 20; condition, good; feed, hay, ensilage, corn-fodder, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- J. C. Hicks—Number of cows, 17; condition, good; feed, hay, ensilage, corn-fodder, corn, oats, bran; stables, good, clean; yard, dry; water, well.
- R. N. Pool—Number of cows, 15; condition, good; feed, hay, stover, corn-meal, bran; stables, good, clean; yard, dry, clean; water, well.
- J. McBane—Number of cows, 10; condition, good; feed, hay, stover, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well; uses aerator.

At Grass Lake:

W. O. Baland—Number of cows, 18; condition, very fine; feed, hay, ensilage, stover, bran, ground corn, oats; stables, good, clean, improved; yard, dry, clean; water, well.



L. E. Dwelle—Number of cows, 23; condition, good; feed, hay, stover, gluten, bran, corn-meal, oil-meal; stables, good, clean; yard, dry, clean; water, well.

Frank Dwelle—Number of cows, 80; condition, good, clean; feed, hay, stover, gluten-meal, bran, malt-sprouts; stables, extra good and clean; yard, dry, clean; water, well.

D. G. Hellier—Number of cows, 9; condition, good; feed, hay, cornfodder, corn-meal, bran, oil-meal, malt-sprouts; stables, good, clean; yard, dry, clean; water, well, spring.

Mrs. Minnie Clark—Number of cows, 11; condition, good; feed, hay, stover, bran, ground corn, oats; stables, good, clean; yard, dry, fairly clean; water, well.

- W. B. Murray—Number of cows, 16; condition, good, clean; feed, hay, stover, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- C. Bunkers—Number of cows, 9; condition, fair, fairly clean; feed, hay, stover, corn-meal; stables, good, clean; yard, dry, clean; water, well.

At Jackson:

J. L. Brockie—Number of cows, 11; condition, good, clean; feed, hay, corn-fodder, ground corn, oats, barley; stables, good, clean; yard dry, rlean; water, well.

Mrs. E. Camp—Number of cows, 11; condition, good; feed, ensilage, corn-fodder, corn-meal, bran; stables, good, clean; yard, dry, clean; water, well.

John Rabeau—Number of cows, 18; condition, good; feed, hay, stover, corn-meal, bran, gluten; stables, temporary but clean; yard, dry, fairly clean; water, well; uses separator.

- E. Elliott—Number of cows, 20; condition, good; feed, hay, cornfodder, bran, corn-meal; stables, fair, fairly clean; yard, dry, clean; water, well; uses separator and aerator.
- A. Laverty—Number of cows, 23; condition, good; feed, hay, ensilage, stover, ground corn, oats, wheat; stables, good, clean; yard, dry, clean; water, well; uses separator and aerator.
- J. Laverty—Number of cows, 15; condition, good, clean; feed, hay, ensilage, stover, ground corn, wheat, oats; stables, good, clean; yard, dry, clean; water, well; uses separator.
- H. W. Phillips—Number of cows, 12; condition, good; feed, hay, cornfodder, bran, gluten, corn-meal; stables, fair, fairly clean; yard, dry, clean; water, well.
 - F. Strand—Number of cows, 9; condition, good; feed, hay, corn-fodder, corn-meal, gluten; stables, good, clean; yard, dry, clean; water, well.

Adelbert Yocum—Number of cows, 22; condition, fair; feed, hay, cornfodder, corn-meal; stables, temporary, clean; yard, fairly clean; water, well.

- J. Saines—Number of cows, 21; condition, good; feed, hay, stover, bran; stables, temporary, clean; yard, dry, clean; water, well; uses aerator.
- J. Blakesly—Number of cows, 23; condition, good; feed, hay, cornfodder, ground corn, oats; stables, fair, fairly clean; yard, dry, clean; water, well.
- A. Ames—Number of cows, 5; condition, good; feed, hay, corn-stalks, bean-pods, corn-meal; stables, fair, fairly clean; yard, dry, clean; water, creek.
- W. A. Worth—Number of cows, 8; condition, good, fairly clean; feed, hay, corn-fodder, ground corn, oats; stables, good, fairly clean; yard, dry, clean; water, well.
- O. H. Kellogg—Number of cows, 8; condition, good; feed, hay, cornfodder, bean-pods, middlings; stables, good, clean; yard, dry, clean; water, well.

Eugene Miller—Number of cows, 5; condition, good; feed, hay, bean-pods, corn-meal, bran; stables, good, clean; yard, dry, clean; water, well.

Warren Thorp—Number of cows, 30; condition, good, clean; feed, hay, stover, ensilage, bran; stables, good, clean; yard, dry, clean; water, well; uses aerator.

S. Bean—Number of cows, 5; condition, good; feed, hay, corn-stalks, corn-meal; stables, fair, fairly clean; yard, fair; water, well.

Jerry Granmore—Number of cows, 9; condition, good; feed, hay, stover, corn-meal; stables, fair, fairly clean; yard, dry, clean; water, well.

F. W. Fowler—Number of cows, 10; condition, good; feed, hay, cornfodder, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.

Frank Hitt—Number of cows, 10; condition, good; feed, hay, stover, ground corn, oats; stables, fair, fairly clean; yard, dry, clean; water, well.

B. O. Newell—Number of cows, 29; condition, good; feed, hay, cornfodder, bran, corn-meal; stables, good, clean; yard, dry, clean; water, well; uses separator and aerator.

Martin Bradford—Number of cows, 36; condition, good; feed, hay, ensilage, stover, bran; stables, fairly good, clean; yard, fair; water, well; uses aerator and separator.

- F. W. Wheeler—Number of cows, 13; condition, fairly clean; feed, hay, corn-stalks, corn; stables, good, clean; yard, dry, clean; water, well.
- H. P. Snow—Number of cows, 15; condition, good; feed, hay, cornfodder, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- H. P. Deering—Number of cows, 17; condition, good; feed, hay, ensilage, ground corn, oats, bran; stables, good, clean; yard, dry clean; water, creek; uses aerator.
- T. F. Cuff—Number of cows, 23; condition, good; feed, hay, ensilage, stover, ground corn, oats, bran; stables, extra good, clean; yard, dry, clean; water, well.
- W. Bailey—Number of cows, 10; condition, good; feed, hay, cornfodder, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- F. C. Sackrider—Number of cows, 13; condition, good; feed, hay, cornstalks, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- E. R. Rhines—Number of cows, 16; condition, good; feed, hay, cornstalks, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.

George Evans—Number of cows, 20; condition good; feed, hay, ensilage, stover, barley, sprouts, middlings; stables, good, clean; yard, dry, clean; water, well; uses aerator.

C. E. Palmer—Number of cows, 8; condition, good; feed, hay, cornstalks, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.

Shoemaker Farm—Number of cows, 26; condition, good; feed, hay, corn-stalks, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.

Byron Foot—Number of cows, 24; condition, good, clean; feed, hay, corn-fodder, ground corn, oats; stables, good, clean; yard, dry, clean; water, well; uses aerator.

- W. Hall—Number of cows, 24; condition, good; feed, hay, corn-stalks, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well; uses aerator.
- C. W. Harrington—Number of cows, 16; condition, good, clean; feed, hay, corn-fodder, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- L. McKane—Number of cows, 20; condition, good; feed, hay, cornfodder, corn-meal; stables, good, clean; yard, dry, clean; water, well.
- T. P. Harrington—Number of cows, 19; condition, good; feed, hay, corn-stalks, ground corn, oats, gluten; stables, good, clean; yard, dry, clean; water, well.
- L. E. Smith—Number of cows, 9; condition, fairly good; feed, hay, stover, ground corn, oats, bran; stables, good, clean; yard, dry, clean; water, well.
- N. L. Spaulding—Number of cows, 8; condition, good; feed, hay, ensilage, corn-stalks, ground corn, oats; stables, good, clean; yard, dry, fairly clean; water, well.

Frank Hall—Number of cows, 22; condition, good; feed, hay, cornfodder, bran, ground corn, oats; stables, good, clean; yard, dry, clean; water, well; uses aerator.

- L. H. Hataling—Number of cows, 10; condition, good; feed, hay, stover, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- C. Weyle—Number of cows, 8; condition, fair, dirty; feed, hay, corn-tstalks, bran; stables, poor, dirty; yard, fairly dry, clean; water, well.

George M. Lewis.—Number of cows, 10; condition, good; feed, hay, corn-fodder, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.

Marshall Johnson-Number of cows, 20; condition, good; feed, hay, stover, bran, corn-meal; stables, good, clean; yard, dry, clean; water, well.

Edward Reynolds—Number of cows, 10; condition, good; feed, hay, corn-fodder, corn-meal; stables, good, clean; yard, dry, clean; water, well.

Edwin Dixon—Number of cows, 9; condition, good; feed, hay, cornstalks, corn; stables, fair, fairly clean; yard, dry, clean; water, well.

- F. B. Carter—Number of cows, 10; condition, good; feed, hay, cornstalks, ground corn, oats; stables, fair, fairly clean; yard, dry, clean; water, well.
- S. P. Williams—Number of cows, 13; condition, good; feed, hay, cornfodder, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- E. A. Sager—Number of cows, 25; condition, good; feed, hay, stover, ground corn, rye, middlings; stables, good, clean; yard, dry, clean; water, well; uses aerator.
- J. M. Lorenz—Number of cows, 16; condition, good; feed, hay, cornfodder, ground corn, oats; stables, good, clean; yard, dry, clean; water, well; uses aerator.
- J. Buchfink—Number of cows, 20; condition, good; feed, hay, stover, bran, corn-meal; stables, fair, fairly clean; yard, dry, clean; water, well.
- J. R. Champlin—Number of cows, 12; condition, good; feed, hay, cornstalks, corn-meal; stables, good, clean; yard, dry, clean; water, well.

George Hutchins—Number of cows, 8; condition, good; feed, hay, cornstalks, bran, corn-meal; stables, good, fairly clean; yard, dry, clean; water, well.

- D. B. Webster—Number of cows, 10; condition, good, clean; feed, hay, corn-fodder, ground corn, oats; stables, good, clean; yard, dry, clean; water, well.
- W. B. White—Number of cows, 10; condition, good; feed, hay, cornfodder, corn-meal; stables, good, clean; yard, dry, clean; water, well.

Byron Pulver—Number of cows, 9; condition, good; feed, hay, cornfodder, corn-meal; stables, good, clean; yard, dry, clean; water, well.

- J. W. Moulton—Number of cows, 20; condition, good; feed, hay, stover, corn-meal; stables, good, clean; yard, dry, clean; water, well; uses aerator.
- H. F. Probert—Number of cows, 49; condition, good; feed, ensilage, corn-fodder, corn-meal, bran, middlings; stables, stone, first class; yard, dry, clean; water, well; uses aerator.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;

2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;

3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;

4. If it is in imitation of, or is sold under the name of another article;

5. If it consist wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poison-

ous or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of

the manufacturer or compounder thereof;

2. They must contain nothing injurious to health;

3. They must not be sold in imitation of, or under the name of another article;

4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture

or compound:

5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter.

CANDY.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

CATSUP.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream

Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee, whether put up for immediate delivery or for stock purposes.

COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing the same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATE AND COCOA.—If containing no other substances than cocoa mass, sugar and flavoring, will not be classed as a compound or mixture.

CANNED GOODS.—Must bear name and address of the packer. If dried before canning must be labeled "Soaked or Bleached Goods," in letters not less than two line pica in size. The sale of peas or other vegetables greened with copper is prohibited.

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and so'd under the name of any ingredient thereof, even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color.

This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper, and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FARINACEOUS GOODS.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound, under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

Honey.—Must be pure. Cannot be mixed with glucose or other substances and sold as "Honey Compound."

JELLY.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

LARD.—Imitation lard in manufacturers' packages must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and

every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

LIQUOR.—Spirituous, fermented or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.

MAPLE SUGAR AND MAPLE SYRUP.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

MILK.—Must contain not less than 3 per cent of fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives in milk is prohibited.

Molasses.—Must be branded with its true and appropriate name and must be true to same. (See Syrup.)

OLEOMARGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter, or calculated to be used as or for butter, must be known and designed as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words, "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary bold-faced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANCAKE FLOUR.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

Pepper.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and

shall contain not more than ten per cent nor less than six and one-half per cent of nonvolatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard," and bear the name and address of the manufacturer, but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard," and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tube or other receptacles the words "Process Butter" must be printed in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them plain and prominent.

STRUP.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose, shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture," and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES .- Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package to be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

1902 WYNKOOP HALLENBECK CRAWFORD CO. OF LANSING, MICH. STATE PRINTERS

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

W.B. SNOW, -	- ,	-	-	-	-	- Commissioner
PERLEY C. HEALD,	•	-	-	-	-	DEPUTY COMMISSIONER
R. E. DOOLITTLE.	_	_	_	_	-	- STATE ANALYST

REGISTRATION OF CHEESE FACTORIES AND CREAMERIES.

The attention of the proprietors of creameries and cheese factories is called to the provision of the State law which requires them to register the location of their factory and the name of its owner or manager with the Dairy and Food Commissioner on or before the first day of April next. Factories registered for year ending March 31, 1902, and intending to continue business after that date must re-register, the intent of the statute being that a new registration be made each year. No fee is required for such registration. The act holds that "whoever violates any of the provisions of this section, in so far as it relates to registration, shall be deemed guilty of a misdemeanor, and for each and every offense shall be punished by a fine of not less than five dollars or more than twenty-five dollars and the cost of the prosecution, or by imprisonment in the county jail for not more than thirty days, or both."

Manufacturers of cheese desiring to use the "Michigan Full Cream Cheese" brand must register with the Department and remit the required fee of one dollar on or before April 1 next. Those already provided with brands and who desire to continue the use of same after April 1, 1902, must re-register and pay the statutory fee. Those who do not desire the use of the brand after April 1, 1902, should return same to the Dairy and Food Department.

Blanks upon which to make either of the above registrations will be furnished upon application to this office.

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1901.

Cases pending July 1, 1901 Cases commenced since said date Cases nolle prossed Cases in which warrants were never served	56 62 42 4
CASES DISPOSED OF.	
Before Examining Magistrates 38 { Defendants bound over to trial courts }	38 0
In Trial Courts 37 { Defendants convicted	35 2 35

PROCEEDINGS HAD DURING THE MONTH OF FEBRUARY.

Complaint was made February 5 in justice court of city of Benton Harbor against Charles D. Hirsch of Benton Harbor, charged with selling colored oleomargarine. Defendant waived examination February 5 and was bound over to the circuit court for the county of Van Buren for trial. February 10, case continued to next term of court.

Complaint was made February 5 against Ben Stienfield, agent for Franklin McVeagh & Co. of Chicago, Ill., charged with selling imitation jelly. Examination set for March 5.

Complaint was made February 5 in justice court of city of Benton Harbor against Samuel Schaus of Butzbach & Schaus, Benton Harbor, charged with selling process butter not properly labeled. Defendant entered a plea of guilty and the court imposed a fine of \$25 and \$4.10 costs.

Complaint was made February 6 in justice court of city of Kalkaska against Harry Hurley of Kalkaska, charged with selling colored oleomargarine. Examination was held February 19 and defendant bound over to the circuit court for the county of Kalkaska for trial.

Complaint was made February 12 in justice court of city of Gaylord against V. W. White, agent for the G. H. Hammond Co., Hammond, Ind., charged with selling colored oleomargarine. Examination was held February 27 and defendant bound over to the circuit court for the county of Otsego for trial.

Complaint was made February 13 in justice court of city of Gaylord against V. W. White, agent for the G. H. Hammond Co., Hammond, Ind., charged with selling colored oleomargarine. Examination was held February 27 and defendant bound over to the circuit court for the county of Otsego for trial.

In the case pending in the circuit court for the county of Cheboygan against O. D. Fisher, agent for W. I. Brotherton of Bay City, charged with selling adulterated pepper, February 10, defendant entered a plea of guilty and the court imposed a fine of \$25.

In the case pending in the circuit court for the county of Cheboygan against O. D. Fisher, agent for W. I. Brotherton of Bay City, charged with selling adulterated pepper, February 10, defendant entered a plea of guilty and the court imposed a fine of \$25.

In the case pending in the circuit court for the county of Cheboygan against O. D. Fisher, agent for W. I. Brotherton of Bay City, charged with selling adulterated pepper, February 10, defendant entered a plea of guilty and the court imposed a fine of \$25.

In the case pending in the circuit court for the county of Cheboygan against Moses DeGowin of Cheboygan, charged with selling colored oleomargarine, February 10, defendant entered a plea of guilty, but stay of sentence was granted pending an appeal to the supreme court.

In the case pending in the circuit court of county of Wexford against Frank Johnson of city of Cadillac, charged with selling colored oleomargarine, on February 4, the court sustained a motion made by defense to quash the information, holding that the act under which case was brought was unconstitutional.

In the case pending in the circuit court for the county of Kalamazoo against Wm. G. Van Kersen of Kalamazoo, charged with selling colored oleomargarine, February 17, case carried over to next term of court.

In the case pending in the circuit court for the county of Kalamazoo against Thomas J. Sloan of Kalamazoo, charged with selling colored oleomargarine, February 17, case continued to next term of court.

In the case pending in the circuit court for the county of Kalamazoo against Samuel Hoekstra of Kalamazoo, charged with selling colored oleomargarine, February 17, case continued to next term of court.

In the case pending in the circuit court for the county of Antrim against Charles Weiffenbach of Bellaire, charged with selling colored oleomargarine, February 24, case continued to May term of court.

In the case pending in the circuit court for the county of Antrim against Antrim Iron Co. of Antrim, charged with selling colored oleomargarine, February 24, case continued to May term of court owing to the illness of defendant.

In the case pending in the circuit court for the county of Calhoun against Will H. Hamilton of Battle Creek, charged with selling colored oleomargarine, February 12, case continued to next term of court.

In the case pending in the circuit court for the county of Wexford against E. G. Snyder & Co. of Cadillac, charged with selling colored oleomargarine, February 3, case was continued until May term of court.

In the case pending in the circuit court for the county of Grand Traverse against Enterprise Grocery Co. of Traverse City, charged with selling colored oleomargarine, February 3, case was continued until May term of court.

In the case pending in the circuit court for the county of Berrien against Charles Freund of city of St. Joseph, charged with selling colored oleomargarine, February 10, case continued to next term of court.

In the case pending in justice court of city of Dowagiac against Fred W. Pugsley of Dowagiac, charged with selling colored oleomargarine, examination was concluded February 14 and defendant bound over to the circuit court for the county of Cass for trial at the March term.

In the following cases complaints were made but parties were never arrested: James Preble, representing J. E. Burns & Co., complaint was made January 18, 1900, in justice court of city of Muskegon; John Kelcher, complaint made September 11, 1900, in police court of city of Detroit; John N. Hunter, complaint made September 11, 1900, in police court of city of Detroit; James Parman, complaint made September 11, 1900, in police court of city of Detroit.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., February 28, 1902.

Hon. W. B. Snow, Dairy and Food Commissioner:

Sir—During the month of February, 12 samples of food products have been examined, 2 being pure and 10 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

. Article.	Total.	Not found adulter- ated.	Found adulter- ated.
Beans Cateup Extracts Jelly Oleomargarine. Vinegar	. 2	0 2 0 0 0	1 0 1 1 4 3
Totals	12	2	10

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

STRING BEANS.

EXTRACTS.

 No. S-142. Sample of vanilla extract from Chas. F. Funke & Co., Detroit.

 Producer, J. P. Deiter, Chicago, Ill.

 Vanillin
 0.036 per cent.

 Coumarin
 0.087 " "

 Vanilla resin
 None to trace.

 Organic acids, gums, etc.
 Present.

 Color
 Foreign.

 Contains coumarin and foreign coloring matter.

JELLY.

No. K-306. Sample of jelly from W. Shaull, Charlotte. Sold by Northrop, Robertson & Carrier, Lansing, Mich. Producer, The J. Weller Co., Cincinnati, Ohio.

Water 32.50	per	cent.
Ash 0.50	• "	66
Reducing sugar 26.46	"	66
Polarization before inversion+98.4	degr	ees.
Polarization after inversion+92.2	- F4	
Starch Presen	t.	
Color Artific		
Imitation fruit jelly artificially colored.		

OLEOMARGARINE.

No. L-218. Sample of oleomargarine from Harmon & Co., Frankfort. Sold by G. H. Hammond Co., Chicago, Ill.

Producer, G. H. Hammond Co., Hammond, Ind.

Oleomargarine containing ingredients that cause it to look like yellow butter.

No. L-219. Sample of oleomargarine from Mason Smith, Beulah.

Sold by G. H. Hammond Co., Hammond, Ind.

Producer, G. H. Hammond Co., Hammond, Ind.

Oleomargarine containing ingredients that cause it to look like yellow butter.

No. S-145. Sample of oleomargarine from Farnum Bros., Detroit.

Producer, Capital City Dairy Co., Columbus, Ohio. Oleomargarine artificially colored.

No. S-146. Sample of oleomargarine from Wm. H. Green & Son, Detroit. Producer, Union Dairy Co., Cleveland, Ohio.

Oleomargarine artificially colored.

VINEGAR.

. No. S-143. Sample of vinegar from The Edward Henkel Co., Detroit.

Producer, Price & Lucas, Louisville, Ky.

Specific gravity	1.0064	
Acid as acetic		
Total solids		
Ash		"
Color	Foreign.	

Distilled vinegar colored and below standard in acid strength.

No. S-144. Sample of vinegar from Herman G. Weidman, Detroit.

Sold by Price & Lucas, Louisville, Ky.

Specific gravity	1.0070
Acid as acetic	3.66 per cent.
Total solids	0.35 " "
Ash	0.12 " "
Color	Foreign.

Distilled vinegar colored and below standard in acid strength.

No. K-307. Sample of vinegar from Osborn & Son, Benton Harbor.

Sold by E. L. Minnich, Royalton, Mich.

Specific gravity	1.0114	
Acid as acetic	3.75 per	r cent.
Total solids	1.76 "	"
Ash	0.40 "	"

Below the standard in acid strength.

INSPECTIONS.

The following places were visited by the Department's inspection force

during the month of December:

Alpena, Benton Harbor, Bessemer, Cadillac, Charlevoix, Cheboygan, Detroit, Durand, East Jordan, Escanaba, East Tawas, Fenton, Flint, Gaylord, Gladstone, Hillsdale, Homer, Ironwood, Kalamazoo, Lapeer, Metamora, Owosso, Pontiac, Reading, Saginaw, E. S., Traverse City.

DAIRY INSPECTIONS.

Report of dairies inspected during the month of February:

At Durand:

N. M. Smith—Number of cows, 13; condition, good; feed, hay, stover, ground rye and oats; stables, fair and fairly clean; fair ventilation; yard, dry and clean; water, well.

Albert Smith—Number of cows, 12; condition, good; feed, hay, cornfodder, ground rye, corn and oats; stables, good and fairly clean; good ventilation; yard, dry and clean; water, well.

- H. W. Smith—Number of cows, 14; condition, good; feed, hay, cornstalks, ground rye, corn and oats; stables, fair and fairly clean; good ventilation; yard, dry and clean; water, well.
- L. Leach—Number of cows, 12; condition, good; feed, hay, stover, ground corn and oats; stables, good and fairly clean; fair ventilation; yard, dry and clean; water, well.
- E. Sayer—Number of cows, 9; condition, good; feed, hay, corn-stalks, ground corn and oats; stables, good and fairly clean; fair ventilation; yard, dry and clean; water, well.
- J. B. Remington—Number of cows, 25; condition, good; feed, hay, stover, corn-meal and middlings; stables, good and clean; fair ventilation; yard, dry and clean; water, well.



At Fenton:

L. Richmond—Number of cows, 12; condition, good; feed, hay, stover, corn-meal and middlings; stables, good and clean; good ventilation; yard, dry and fairly clean; water, well.

Wm. Hadlis—Number of cows, 20; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and clean; water, well.

T. D. Barrews—Number of cows, 13; condition, good; feed, hay cornstalks, ground corn and oats; stables, good and clean; good ventilation; yard, dry and fairly clean; water, well.

At Flint:

- F. M. Haward—Number of cows, 21; condition, good; feed, hay, cornfodder, bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. Baker—Number of cows, 20; condition, good; feed, ensilage, hay, corn-stalks, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- L. C. Ketter—Number of cows, 20; condition, good; feed, hay, ensilage, bran and oat-meal; stables, good and fairly clean; good ventilation; yard, dry and clean; water, well.

Harry Baker—Number of cows, 26; condition, good; feed, ensilage, corn-fodder; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- W. C. White—Number of cows, 18; condition, good; feed, hay, stover, bean-pods, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. B. Ells—Number of cows, 12; condition, good; feed, hay, cornfodder, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- T. H. Baker—Number of cows, 45; condition, good; feed, hay, ensilage and beet-pulp; stables, good and fairly clean; good ventilation; yard, dry and clean; water, well.

Jennie Akins—Number of cows. 22; condition, good and clean; feed, hay, corn-fodder, ground corn and oats; stables, fair and fairly clean; good ventilation; water, well.

J. L. Peirce—Number of cows, 11; condition, good; feed, hay, cornstalks, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; water, well.

Ray Perry—Number of cows. 6; condition, good; feed, corn-stalks and corn-meal; stables, fair and fairly clean; fair ventilation; yard, dry and clean; water, well.

Flint Sanitary Milk Co.—Number of cows, 290; factory complete in every particular.

- T. S. Savens—Number of cows, 17; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- W. B. Hollingsworth—Number of cows, 23; condition, good; feed, hay, stover, bean-pods, bran and corn-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- H. J. Adams—Number of cows, 30; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.

At Kalamazoo:

Joe McGinnis—Number of cows, 8; condition, good; feed, hay, cornstalks and corn-meal; stables, fairly good and clean; yard, dry and clean; water, well.

- S. C. Gibbs—Number of cows, 28; condition, good; feed, hay, cornstalks, bran and corn-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well and spring.
- W. E. Buzzance—Number of cows, 25; condition, good; feed, hay, cornfodder and corn-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- Geo. Kendall—Number of cows, 18; condition, good; feed, hay, stover, corn-meal and buck-wheat bran; stables, fair and clean; fair ventilation; yard, dry; water, well.
- D. D. Streeter—Number of cows, 64; condition, extra good; feed, hay, ensilage, corn-meal, bran and gluten; stables, good and clean; uses absorbents and disinfectants; fine system of ventilation; yard, dry and clean; water, well.

At Lapeer:

State Home for Feeble Minded—Number of cows, 23; condition, good and clean; feed, hay, stover, sugar-beets and carrots; stables, new with all latest improvements in ventilation, drainage, stables and stanchions; yard, dry, clean; good drainage; water, well.

Nelson Miles—Number of cows, 24; condition, good; feed, hay, cornstalks, ground corn and oats; stables, fair and fairly clean; fair ventilation; yard, large amount of manure allowed to accumulate; water, river.

T. McElroy—Number of cows, 30; condition, good; feed, hay. cornstalks, bran and corn-meal; stables, good and clean; good ventilation; yard. dry and clean; water, well.

David Fellows—Number of cows, 12; condition, good; feed, hay, cornstalks, and middlings; stables, good and fairly clean; fair ventilation; yard, dry and clean; water, well.

At Pontiac:

Eastern Michigan Asylum—Number of cows, 70; condition, good and clean; feed, hay, ensilage, bran, ground corn, oats and gluten-meal; stables, good and clean; good ventilation; nicely arranged for convenience and comfort of the herd; water, well.

- John R. Taylor—Number of cows, 27; condition, good and clean; feed, hay, corn-stalks, corn-meal and barley sprouts; stables, good and clean; fair ventilation; yard, dry and clean; water, well and city.
- J. S. Taylor—Number of cows, 22; condition, good and clean; feed, hay, stover, corn-meal and malt sprouts; stables, fair and clean; fair ventilation; yard, dry and clean; water, well.
- Chas. Bartlett—Number of cows, 18; condition, good; feed, hay, ensilage, pea-straw, cotton-seed-meal; stables, good and clean; good ventilation; yard, dry and clean; water, city.
- R. Bartlett & Son—Number of cows, 73; condition, good and clean; feed, hay, ensilage, pea-straw, cotton-seed-meal; stables, good and clean; good ventilation; yard, dry and clean; water, city.
- Callow & Cole—Number of cows, 22; condition, good and clean; feed, hay, ensilage, corn-fodder, ground corn and oats; stables, fair and clean; fair ventilation; yard, dry and clean; water, spring.
- Wm. Kemp—Number of cows, 26; condition, good and clean; feed, hay, ensilage, corn-stalks, middlings and cotton-seed-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well and spring.
- B. M. Webster—Number of cows, 27; condition, good and clean; feed, hay, corn-stalks, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.

Stephen Nott—Number of cows, 37; condition, good and clean; feed, hay, stover, ensilage, corn, oats and cotton-seed-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.

K. L. Grow—Number of cows, 36; condition, good and clean; feed, hay, stover, ensilage, corn, oats and cotton-seed-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

- 1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;
- 2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;
- 3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;
 - 4. If it is in imitation of, or is sold under the name of another article;
- 5. If it consist wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poison-

ous or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;

2. They must contain nothing injurious to health;

3. They must not be sold in imitation of, or under the name of another article:

4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture

or compound;

5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled "Buckwheat Flour Compound," "Buckwheat Flour Substitute." or "Adulterated Buckwheat Flour." in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter.

CANDY.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

CATSUP.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream

Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee, whether put up for immediate delivery or for stock purposes.

COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing the same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATE AND COCOA.—If containing no other substances than cocoa mass, sugar and flavoring, will not be classed as a compound or mixture.

CANNED GOODS.—Must bear name and address of the packer. If dried before canning must be labeled "Soaked or Bleached Goods," in letters not less than two line pica in size. The sale of peas or other vegetables greened with copper is prohibited.

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color.

This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper, and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FABINACEOUS GOODS .-- Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound, under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

HONEY.-Must be pure. Cannot be mixed with glucose or other substances and sold as "Honey Compound."

JELLY .- Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

LARD .- Imitation lard in manufacturers' packages must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

LIQUOR.—Spirituous, fermented or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.

MAPLE SUGAE AND MAPLE SYRUP.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

MILK.—Must contain not less than 3 per cent of fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives in milk is prohibited.

Molasses.—Must be branded with its true and appropriate name and must be true to same. (See Syrup.)

OLEOMARGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter, or calculated to be used as or for butter, must be known and designed as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where eleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words, "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where eleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary bold-faced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica

in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANCAKE FLOUR.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

Pepper.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and

shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard," and bear the name and address of the manufacturer, but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard," and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which

must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them plain and prominent.

SYRUP.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose, shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture," and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package to be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

shall contain not more than ten per cent nor less than six and one-half per cent of nonvolatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard," and bear the name and address of the manufacturer, but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard," and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them plain and prominent.

SYRUP .- Each barrel, cask, can, keg or pail containing molasses, syrup or glucose, shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture," and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package to be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

1902 WYNKOOP HALLENBECK CRAWFORD CO. OF LANSING, MICH. STATE PRINTERS

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

W. B. SNOW, -	-	-	-	-	-	-	Commissioner
PERLEY C. HEALD,		-	-	-	-	DEPUT	TY COMMISSIONER
R. E. DOOLITTLE,	_	_	_	_	-	_	STATE ANALYST

STATE OF MICHIGAN DAIRY AND FOOD COMMISSION.

Labeling of Flavoring Extracts.—The attention of the trade is called to the proper labeling of flavoring extracts. All packages containing extracts must bear the name and address of the manufacturer; and such name and address must be in an ordinarily conspicuous place so that it will be seen and read by the purchaser. The placing of the groceryman's name on the label proper and then the manufacturer's on a slip over the cork where it is often rubbed off, cannot be construed by the Department as complying with the intent of the law. Dealers, before purchasing, should see that the goods comply with the law in this respect.

Where the extract is composed of more than one principle as for example an extract of vanilla and tonka, the type used must be similar in size, and the name of the superior article must not be given greater

prominence than the inferior.

Adulteration of New Orleans Molasses.—For some time past there has been received at the laboratory of the Department many samples of New Orleans molasses which were sent in by grocerymen from different parts of the State. All of these samples were from the same producer, viz.: The Louisiana Syrup and Molasses Co., St. Louis, Mo. and have proved with a single exception to be adulterated with glucose. Samples of this firm's goods taken by the regular inspectors employed by the Department show the same result. We regret exceedingly that this firm is beyond the reach of process from our criminal courts, and under the circumstances it becomes necessary to employ other means to correct the deceitful imposition practiced by them. The responsibility for the purity of all articles purchased by a firm beyond the Department's jurisdiction must necessarily be confined solely to the dealer within the State handling the same. We therefore warn the trade of the State against the purchase of this company's adulterated products either by mail or otherwise, as in the future prosecutions will necessarily be commenced against the dealer found with the adulterated goods in his possession.

Supreme Court Decision on Liability of Agent.—When we first assumed control of this Department we announced through the bulletin the continuation of the policy then in force of entering prosecutions as far as possible against the party or parties most responsible for adulteration or violation of the law. Under this rule retail dealers who acted in good faith in the purchase of goods and exercised such caution as good business prudence demands were relieved from prosecution and punish-

ment was directed against the manufacturers as far as possible. Manufacturers or jobbers living within the State were held directly liable for goods sold to retailers while with manufacturers and jobbers living outside the State the agent for the firm was held responsible, the authority for which we supposed was given by section 17 of the general food law which says that: "The taking of orders, or the making of agreements or contracts, by any person, firm or corporation, or by any agent thereof for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of this act shall be deemed a sale within the meaning of this act." opinion in the case of People vs. John Skillman handed down on the 5th inst, the Supreme Court holds that "The taking of an order for an article not within the statute and forwarding it does not constitute an offense." (The opinion in full is found below.) This is in effect that when an agent takes an order for pure goods and his employer fills it with an adulterated article the agent cannot be held responsible under the present law. This makes our food law discriminate greatly against the manufacturer within the State as he can be held strictly accountable for the goods he sells the retailer, while the manufacturer outside the State cannot be reached. It also makes it necessary for us to change our plan of enforcement of the food laws and in the future the responsibility for the possession of adulterated goods will be placed with the dealer where found. In the case of the People vs. Snowberger (113 Mich. 86) the Supreme Court has held that "It was within the power of the Legislature to pass the act making it an offense punishable with fine and imprisonment to sell adulterated food or drink, although the person selling the same had no knowledge that it is adulterated." By this decision every dealer in food products is primarily responsible for the purity of the goods he sells. All dealers should give careful attention to the monthly bulletin issued by the Department in which they will find all adulterated goods analyzed during the month as well as the commissioners rulings on questions that arise relating to manufacture and sale of food products.

The People of the State of Michigan

VS.

John Skillman, Respondent.

An information was filed against the respondent which, omitting the formal parts, reads as follows: "That one John Skillman heretofore, to wit: on the sixteenth day of September A. D. 1901, at the city of Muskegon and county of Muskegon aforesaid, did unlawfully offer for sale and did sell to Albert Towl a large quantity, to wit: a certain compound under the name of Quince Jelly, which was then and there adulterated within the meaning of the Act No. 193, of the Public Acts of the State of Michigan of the year 1895, as amended by Act No. 118 of the Public Acts of the State of Michigan of the year 1897, as amended by Act No. 117 of the Public Acts of the State of Michigan of the year 1899, in this to wit: that said compound was then and there made and composed in part of glucose, starch and other substances, and was then

and there colored in imitation of fruit jelly contrary to the form of the statute."

After the testimony was all in, a motion was made asking the judge, for various reasons, to direct a verdict in favor of respondent. This motion was overruled. The case was submitted to the jury which returned a verdict of guilty.

A great many errors are assigned. We think some of them which we shall discuss are well taken, but as the case, if ever tried again, will not present the same questions now presented by counsel we deem it unnecessary to pass upon all the questions argued by them in the briefs.

To sustain the case of the people, testimony in substance as follows was introduced: It was shown the respondent had for some years been a traveling salesman in the employ of Reid, Murdock & Company of Chicago, that he solicited an order from Mr. Towl, a grocer of Muskegon, that Mr. Towl gave him an order for a case of assorted pure fruit jelly. Mr. Skillman did not have the goods with him, but reduced the order to writing in the presence of Mr. Towl at his store, and forwarded it to the house in Chicago. It is as follows:

"Reid, Murdock & Co., Chicago. Name Albert Towl, Town Muskegon State Michigan.

Ship by Barry line.

Sept. 12, '01.

Salesman Skillman.

1 c P. F. Jelly Med, Asst. 1 c P. F. Jell Med. Currant." 60 days."

100

100

"1 c P. F. Jelly Med. Asst. was explained to mean 1 case pure fruit jelly medium size assorted glasses. Mr. Towl testified Mr. Skillman claimed it was pure fruit jelly for which he took the order, and that was what he intended to buy. It was not shown that respondent had anything further to do with the transaction than as above stated. Later a case of goods was received from Reid, Murdock & Company and testimony was given tending to show that a tumbler of this jelly was sold to Mr. Bennett inspector of the Dairy and Food Department of Michigan and by him forwarded to the State Analyst where it is claimed upon analysis it was shown to be a mixture of fruit juice, glucose, starch, and coloring matter. Upon the cross examination of Mr. Towl the following occurred:

"Q. Did you give Mr. Skillman more than one order for fruit jelly about this time? A. Well, he had two or three orders, I think two at

least.

"Q. Two orders? A. One of them might have been ordered by mail.

"Q. Now you received two consignments of fruit jelly from the orders you have given to Mr. Skillman? A. I think so, yes, sir.

"Q. Upon which one of these orders did you receive this particular tumbler of jelly that you afterwards sold to Mr. Bennett? A. I couldn't say. The one that he bought was out of that order I think. (Witness pointing to order exhibited.)"

The defense claimed that the label "pure fruit jelly" placed upon the tumbler analyzed was put there by mistake. It was their claim that Reid, Murdock & Company dealt in two kinds of jelly, those made out

of pure fruit and those made in imitation of pure fruit, and that when the imitation was sold in Michigan and certain other states their instructions were to label them "imitation" and that these instructions were furnished in writing to their agents including the respondent and offered testimony tending to prove this claim. The written instructions were also offered in evidence but with the testimony offered were excluded by the court.

Among other requests offered by the respondent was the following:

"Under the undisputed evidence in this case there is nothing to show that the respondent offered to sell any jelly in violation of any statute of this State, but, on the contrary, it is shown that respondent offered to sell strictly pure fruit jelly and sent such an order to Reid, Murdock & Company of Chicago, Illinois, and the charge in the information for selling and offering to sell adulterated jelly is not sustained by the evidence, and your verdict should be not guilty."

The judge refused to give this request but charged the jury: "It is recognized by the legislators and is a matter of common knowledge that many of the wholesalers that are doing business in Michigan are not residents of this State, so the Legislature saw fit to make a law where a man solicited the sale of pure jellies, took an order for the sale of pure jellies, and in response to that order and offer a different class of goods was furnished, that the party should be guilty of violating this particular law. In other words, instead of that order or offer and the furnishing of goods delivered to the party by a party who might be a non-resident of the State, that it should relate to the man who actually made the offer, the man who actually took the order for the furnishing of this particular article. The people claim that this is the matter in which this defendant here is liable."

This statement of the law is sought to be justified by People v. Snowberger, 113 Mich. 86, and People v. Grocer Co., 118 Mich. 604. A reference to these cases will show that the respondent in each of them admitted making the sale of these goods. In this case the respondent denies that he sold any goods coming within the provisions of the statute. Giving the only interpretation to the testimony as it appears in the record which can be fairly given to it it shows Mr. Towl was solicited to give an order for pure fruit jelly. He gave such an order. It was reduced to writing and in the writing the jelly was described as pure fruit jelly. As before stated the only connection of the respondent to the transaction as shown by the record is the taking of an order for an article not within the terms of the statute and forwarding it. This does not constitute an offense. It might as well be urged that if a traveling salesman takes an order for Michigan beet sugar, and forwards a written order for such sugar, that if the house, instead of filling the order as written, sends glucose with a label upon the package containing it calling it Michigan beet sugar the salesman would be guilty of an offense. This we do not understand to be the law. Upon the case as made the circuit judge should have directed a verdict of not guilty. People v. Howard, 50 Mich. p. 242.

The verdict is set aside and a new trial ordered.

J. B. MOORE,
FRANK A. HOOKER,
R. M. MONTGOMERY,
C. B. GRANT.

Digitized by

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1901.

Cases commenced since said date		56 59 49
CASE	S DISPOSED OF.	
Before Examining Magistrates 38	Defendants bound over to trial courts	88
In Trial Courts 38	Defendants convicted	86
	***************************************	34

PROCEEDINGS HAD DURING THE MONTH OF MARCH.

Complaint was made on the 20th inst. in justice court, township of Frankenmuth, county of Saginaw against Henry Bauer, charged with selling milk produced from cows fed upon the refuse from a brewery. Defendant pleaded guilty and a fine of \$10 and costs was imposed by the court.

The case pending in the circuit court of the county of Ottawa against John M. Cook of Grand Haven, charged with selling colored oleomargarine was on the 17th inst. adjourned until April 8.

The case pending in the circuit court of the county of Ottawa against Cornelius M. Phernambucq of Grand Haven, charged with selling colored oleomargarine was on the 17th inst. adjourned until April 8.

The case pending in the circuit court of the county of Cass against W. Pugsley of Dowagiac, charged with selling colored oleomargarine was on the 18th inst. continued until the May term of court.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., March 31, 1902.

Hon. W. B. Snow, Dairy and Food Commissioner:

Sir—During the month of March, 57 samples of food products have been examined, 11 being pure and 46 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

Article.	Total.	Not found adulter- ated.	Found adulter- ated.
Baking powder Buckwheat flour. Butter Cayenne Coffee Coffee Cream of tartar	1 1 2 1 1	1	1 2 1
Extracts (flavoring) Honey. Jam Jelly Mace. Molasses.	14 1 2 15 2 4	2 2 1	13 1 15
Mustard (dry). Oleomargarine Pepper Preserves. Vinegar.	2 6 1 2 1	2 1	2 6 1
Totals	57	11	46

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

BAKING POWDER.

No. L-251. Sample of baking powder from Carson City Mercs Sold by Excelsior Mfg. Co., Mt. Pleasant, Mich.	intile C	ъ., (Carson City	٠.
Available carbonic acid gas. Bicarbonate of soda Acid phosphate of lime. Alum Corn starch	9.22	per	cent.	
Label does not bear name and address of manufacturer.			•	
BUTTER.				
No. U-23. Sample of butter from Co-operative Co., Iron Mour	ntain.			
Sold by Illinois Creamery, Chicago, Ill. Producer, Illinois Creamery, Chicago, 111. Sample is process butter.				
No. U-29. Sample of butter from Seller Bros., Houghton. Sold by Crescent Creamery, St. Paul, Minn. Producer, Crescent Creamery, St. Paul, Minn. Sample is process butter.			•	
COFFEE.				
No. L-236. Sample of "Coffee Siftings" from W. S. Canfield Co	o., Beld	ing.		
Total ash Stones, sand, etc. Whole coffee berries Broken and immature berries Pieces of husks, stems, etc.	16.15 9.05 18.56 59.42 12.97	_	cent. " " " "	
Dirty sample of broken coffee berries with few whole berries	added.			
CREAM OF TARTAR.				
No. L-250. Sample of Cream of Tartar from F. W. Balch, Ith	aca.			
Cream of tartar Insoluble residue Aluminium oxide (Al ₂ O ₃). Iron oxide (Fe ₂ O ₃) Calcium oxide (CaO) Sodium oxide (Na ₂ O). Phosphoric acid (P ₂ O ₅).	18.04 0.13 4.57 0.18 11.42 3.01 10.39	per	cent.	
Sulphuric acid (SO ₃)	19.79 8.42	"	"	
Free and combined water (by difference)	24.05	66	"	

Contains phosphate and sulphate of lime, alum and corn starch.

EXTRACTS.

No.	L-228. Sample of vanilla from D. L. Hyde, Greenville.	0.038 per cent.
	Coumarin	None. Present.
	Resin	Present.
	Color	Foreign.
Con	tains foreign coloring matter, and label does no bear name	and address of manu-
factur		
No.	L-228. Sample of lemon extract from D. L. Hyde, Gree	enville.
2.0.	Solids	0.10 per cent.
		+3.00 degrees.
	Lemon oil about	1.00 per cent.
	Dilute alcohol	
	Coloring matter	
Lab	el does not bear name and address of manufacturer.	
No.	L-238. Sample of "Star Extract Vanilla" from W. F. No	esen, St. Louis.
	Vanillin	0.066 per cent.
	Coumarin	None.
	Vanilla resin	Present.
	Organic acids, gums, etc	Present. Foreign.
Com	tains foreign coloring matter, and label does not bear	•
	facturer.	name and address or
	L-240. Sample of "Our Special Extract Vanilla and	Tonka" from Tyrolers
•	rium, St. Louis.	
	by DeBoe, King & Co., Grand Rapids, Mich.	
Produ	eer, DeBoe, King & Co., Grand Rapids, Mich.	
	Vanillin	None.
	Coumarin	0.112 per cent. None.
	Vanilla resin	Present.
	Color	Foreign.
Con	tains no extract of vanilla and contains a trace of foreig	n coloring matter.
	L-242. Sample of "Compound Raspberry" (Grandma's ff. Ithaca.	Flavors) from John
Produ	icer, Auburn Extract Co., Auburn, N. Y.	
	Solids	0.20 per cent.
	Glycerine	
	Compound ethers Dilute alcohol	
	Coloring matter	
An	artificial preparation.	
	L-243. Sample of "Compound Banana" (Grandma's Fla Ithaca.	ivors) from John Bot-
Produ	cer, Auburn Extract Co., Auburn, N. Y.	
	Solids	0.20 per cent.
	Glycerine	
	Compound ethers	
	Coloring matter	
A	artificial preparation.	

No. L-244. Sample of "Compound Pineapple" (Grandma's Botroff, Ithaca.	Flavors) from John	
Producer, Auburn Extract Co., Auburn, N. Y.		
Solids Glycerine Compound ethers Dilute alcohol Coloring matter An artificial preparation.	0.34 per cent.	
No. L.945 Sample of "Compound Strawberry" (Grandme)	s Flavors) from John	
Botroff, Ithaca.		
Producer, Auburn Extract Co., Auburn, N. Y.		
Solids Glycerine Compound ethers Dilute alcohol Coloring matter artificial preparation.	0.50 per cent.	
L-246. Sample of "Compound Vanilla" (Grandma's Fla	vors) from John Bot-	
Chaca.		
Cer, Auburn Extract Co., Auburn, N. Y. Vanillin		
Vanillin Coumarin Vanilla resin Organic acids, gums, etc. Coloring matter An artificial preparation.	0.160 per cent. 0.141 " " None. Present. Foreign.	
No. L-247. Sample of "Compound Lemon" (Grandma's Flavors) from John Botroff, Ithaca.		
Producer, Auburn Extract Co., Auburn, N. Y.		
Solids	0.06 per cent.	
No. L-248. Sample of "Compound Orange" (Grandma's Flaroff, Ithaca.	vors) from John Bot-	
Producer, Auburn Extract Co., Auburn, N. Y. Solids Polarization Orange oil Color An artificial preparation.	0.02 per cent. 0.0 degrees. None. Artificial.	
No. U-19. Sample of "Champion Flavoring Extract of Van Sundberg, Iron Mountain.	illa" from Anderson &	
Sold by Joannes Bros. & Co., Green Bay, Wis.		
Producer, Joannes Bros. & Co., Green Bay, Wis.		
Vanillin Coumarin Vanilla resin Organic acids, gums, etc. Color Contains foreign coloring matter.	0.190 per cent. None. Present. Present. Foreign.	
·	О Т	

	CIMIL OF MICHIGAN.	
	U-22. Sample of "Martha Washington Artificial Flavoris J. E. Anderson & Co., Norway.	ng Extract of Banana*
	by Joannes Bros. & Co., Green Bay, Wis.	
	Solids	2.70 per cent.
An	Alcohol	
No. Moun	U-27. Sample of "Globe Extract Tonka-Vanilla" from	m Rusky Bros., Iron
_	by Steele-Weedles & Co., Chicago, Ill. noer, Globe Co., Chicago, Ill.	
Con	Vanillin Coumarin Vanilla resin Organic acids, gums, etc. Color tains foreign coloring matter.	0.044 per cent. 0.060 " " Present. Present. Foreign.
	HONEY.	
No. Iron l	U-17. Sample "Extracted Honey, Club House Brand" Mountain.	from Richard White,
Sold i	by Franklin, McVeagh & Co., Chicago, Ill.	
	Water Ash Reducing sugar Polarization before inversion Polarization after inversion	
Con	tains glucose.	<u>:</u>
	JELLY.	
	L-220. Sample of "Orange Jelly" from C. Petersen, Upperby W. J. Gould & Co., Detroit, Mich.	r Big Rapids.
Produ	icer, J. T. Pillman & Co., Ayer, Mass.	
	Water Ash Reducing sugar Polarization before inversion +	33.85 per cent. 0.64 " " 30.91 " " 114.8 degrees.
	Polarization after inversion + Starch Salicylic acid	
Imi	tation fruit jelly.	
	L-221. Sample of "Strawberry Jelly" from C. Petersen, U	Upper Big Rapids.
	y W. J. Gould & Co., Detroit, Mich. Icer, J. T. Pillman, Ayer, Mass.	•
	Water Ash Reducing sugar	36.06 per cent. 0.58 " " 28.24 " "
	Polarization before inversion + Polarization after inversion + Starch	117.2 degrees.
	Salicylic acid Color	Present. Artificial.
Imi	tation fruit jelly artificially colored.	Coogla

No. L-222. Sample of "Raspberry Jelly" from C. Petersen, U	pper Big Rapids.
Sold by W. J. Gould & Co., Detroit, Mich.	
Producer, J. T. Pillman & Co., Ayer, Mass.	
Water	36.10 per cent.
Ash	0.62 " " 28.94 " "
Polarization before inversion+	
Polarization after inversion+	104.1 "
Starch Salicylic acid	Trace. Present.
Color	Artificial.
Imitation fruit jelly artificially colored.	
No. L-223. Sample of "Currant Jelly" from C. Petersen, Upp	er Big Rapids.
Sold by W. J. Gould & Co., Detroit, Mich.	· •
Producer, J. T. Pillman & Co., Ayer, Mass.	
Water	32.85 per cent.
AshReducing sugar	0.71 " " 32.38 " "
Polarization before inversion+	
Polarization after inversion+	112.9 "
Starch Salicylic acid	Present. Present.
Color	Artificial.
Imitation fruit jelly artificially colored.	•
No. L-225. Sample of "Pure Fruit Jelly, Red Raspberry" fro Greenville.	om J. E. Van Wormer,
Sold by Reid, Murdock & Co., Chicago, Ill.	
Water	36.77 per cent
Ash	0.36 - "
Reducing sugar Polarization before inversion	40.60 " "
Polarization after inversion	
Starch	Present.
Color	Artificial.
Imitation fruit jelly artificially colored.	
No. L-226. Sample of "Pure Fruit Jelly, Strawberry" fro Greenville.	m J. E. VanWormer,
Sold by Reid, Murdock & Co., Chicago, Ill.	
Water	38.20 per cent. 0.23 " "
Ash	45.93 " "
Polarization before inversion	
Polarization after inversion	•
Starch	Present. Artificial.
Imitation fruit jelly artificially colored.	_
No. L-227. Sample of "Pure Fruit Jelly, Currant" from J. E. V	vanWormer, Gr eenville.
Sold by Reid, Murdock & Co., Chicago, Ill.	·
Water	37.45 per cent.
Ash	0.40 " "
Reducing sugar	40.36 " " +6.2 degrees.
Polarization before inversion	+6.2 degrees. -21.8 "
Starch	Present.
Color	Artificial.

Contains starch and is artificially colored.

No. L-232. Sample of "Pure Fruit Jelly, Currant" from Lamb Bros., Belding.
Sold by Reid, Murdock & Co., Chicago, Ill.
Water 34.88 per cent. Ash 0.44 " " Reducing sugar 45.95 " " Polarization before inversion +20.4 degrees. Polarization after inversion +10.3 " Starch Present. Color Artificial.
Imitation fruit jelly artificially colored.
No. L-233. Sample of "Pure Fruit Jelly, Quince" from Lamb Bros., Belding.
Sold by Reid, Murdock & Co., Chicago, Ill.
• Water 33.63 per cent. Ash 0.32 " " Reducing sugar 38.56 " " Polarization before inversion +28.0 degrees. Polarization after inversion +11.0 " Starch Present. Color Artificial.
Imitation fruit jelly artificially colored.
No. L234. Sample of "Pure Fruit Jelly, Strawberry" from Lamb Bros., Belding.
Sold by Reid, Murdock & Co., Chicago, Ill.
Water 36.50 per cent. Ash 0.34 " " Reducing sugar 38.32 " " Polarization before inversion +28.0 degrees. Polarization after inversion +13.6 " Starch Present. Color Artificial. Imitation fruit jelly artificially colored.
No. L-235. Sample of "Pure Fruit Jelly, Crabapple" from Lamb Bros., Belding.
Sold by Reid, Murdock & Co., Chicago, Ill.
Water 32.61 per cent. Ash 0.48 " " Reducing sugar 40.92 " " Polarization before inversion +30.0 degrees. Polarization after inversion +15.2 " Starch Present. Color Artificial. Imitation fruit jelly artificially colored.
No. L-249. Sample of "Pure Fruit Jelly, Strawberry" from Lewis & Yost, Ithaca
Sold by Reid, Murdock & Co., Chicago, Iil.
Water 37.14 per cent. Ash 0.43 " " Reducing sugar 39.85 " " Polarization before inversion +26.4 degrees. Polarization after inversion +12.1 " Starch Present. Color Artificial. Imitation fruit jelly artificially colored.

No. U-18. Sample of plum jelly ("Telmo" brand) from Richard White, Iron Mountain.

Sold by Franklin, McVeagh & Co., Chicago, Ill. Producer, Franklin, McVeagh & Co., Chicago, Ill.

Water	40.05	per cent.
Ash	0.46	~" "
Reducing sugar	.47.62	" "
Polarization before inversion	-4.2	degrees.
Polarization after inversion	7.7	°"
Starch	Preser	at.
Color	Artifi	cial.

Imitation fruit jelly artificially colored.

No. U-20. Sample of grape jelly ("Banquet" brand) from Ball & Walters, Crystal Falls.

Sold by Rondy, Peckman & Co., Chicago, Ill. Producer, Lamon-Gohl Syrup Co., Chicago, Ill.

Water		
Ash ().60 ~"	"
Reducing sugar 28	i.45 "	. "
Polarization before inversion+24	1.6 deg	rees.
Polarization after inversion20).9	"
Starch Pr	resent.	
Color A	rtificial	

Contains starch and is artificially colored.

No. U-25. Sample of red raspberry jelly ("Telmo" brand) from Daprato & Rigassi, Iron Mountain.

Sold by Franklin, McVeagh & Co., Chicago, Ill. Producer, Franklin, McVeagh & Co., Chicago, Ill.

Water 26	75 per	cent.
Ash 0.	47 -"	"
Reducing sugar	28 "	66
Polarization before inversion+54.	6 deg	rees.
Polarization after inversion+0.	9 ັ	"
Starch Pro	sent.	
Color Ar	ificial	,

Imitation fruit jelly artificially colored.

MOLASSES.

No. L-230. Sample of "Magnolia New Orleans Molasses" from Roy VanWormer, Greenville.

Sold by Dwyer & Vhay, Detroit, Mich. Producer, The J. Weller Co., Cincinnati, Ohio.

 Water
 21.50 per cent.

 Ash
 0.66 " "

 Reducing sugar
 40.09 " "

 Polarization before inversion
 +121.0 degrees.

 Polarization after inversion
 +114.4 "

Contains glucose.

No. R-127. Sample of molasses ("Myrtle Grove" brand) from International Steam Bakery, Saginaw.

Producer, Louisiana Syrup & Molasses Co., St. Louis, Mo.

WaterAsh	25.60 1.56	per cen	t.
Reducing sugar	28.38	ee ee	
Polarization before inversion+	116.8	degrees	
Polarization after inversion+	101.6	"	

Contains glucose.

No. U-26 Sample of "Choice New Orleans Centrifugal Molasses" ("Milly" brand) from Daprato & Rigassi, Iron Mountain.

Sold by Franklin, McVeagh & Co., Chicago, Ill.

Producer, Franklin, McVeagh & Co., Chicago, Ill.

Water 2	7.48	per	cent.
Ash	3.15	-"	66
Reducing sugar 2	3.88	"	"
Polarization before inversion+8	9.6	degr	rees.
Polarization after inversion	4.5	٠,	•
_			

Contains glucose.

MUSTARD (dry).

No. L-231. Sample of mustard from M. H. Slawson, Greenville.

Sold by Dwyer & Vhey, Detroit, Mich.

Producer, E. R. Durkee & Co., New York.

Ash	5.84 per cent.
Mustard	
Turmeric	

Colored with turmeric.

No. L-252. Sample of mustard from Parmenter & Pratt. Ashley.

Ash	6.63	per	cent.
Starch	5.20	-"	66
Volatile ether extract		"	66
Non-volatile ether extract	17.88	66	**
Crude fibre	4.23	"	66

Contains small amount of starch and is high in fibre.

OLEOMARGARINE.

No. S-147. Sample of oleomargarine ("Purity" brand) from W. C. Clark, Detroit. Sold by Michigan Produce Co., Detroit.

Producer, Capital City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-148. Sample of oleomargarine ("Excelsior" brand) from Dempsey & Osler, Detroit.

Sold by Earnest Veale, Detroit, Mich.

Producer, Freedman & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-149. Sample of oleomargarine ("Daisy" brand) from C. A. Datcher, Detroit. Producer, W. J. Moxley & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-150. Sample of oleomargarine ("Purity" brand) from H. J. Lane, Detroit. Sold by Michigan Produce Co., Detroit.

Producer, Capitol City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-151. Sample of oleomargarine ("Calumet" brand) from Kohn & Muellen, Detroit.

Sold by Michigan Produce Co., Detroit.

Producer, G. H. Hammond Co., Hammond, Ind.

Oléomargarine artificially colored.

No. S-152. Sample of oleomargarine ("Purity" brand) from Kohn & Muellen, Detroit. Sold by Michigan Produce Co., Detroit.

Producer, Capitol City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

PEPPER.

No. L-224. Sample of pepper from J. S. Newell & Co., Coral. Sold by C. W. Inslee, Detroit.

Total ash			
Starch			
Volatile ether extract	0.85	66	66
Non-volatile ether extract	5.84	66	"
Crude fibre	19.70	"	66

Consists mostly of ground pepper shells containing much dirt.

3

INSPECTIONS.

The following places were visited by the Department's inspection

force during the month of March:

Ashley, Bay City, Belding, Big Rapids, Blumfield, Butternut, Carson City, Colon, Comstock, Coral, Crystal Falls, Detroit, Frankenmuth, Greenville, Glendale, Gobleville, Grand Rapids, Hancock, Homer, Houghton, Iron Mountain, Ithaca, Jonesville, Kalamazoo, Laurium, Muskegon, Newaygo, Norway, Oshtemo, Paris, Parma, Portage, Reese, Saginaw, E. S., Sheridan, Stanton, St. Louis, Trufant, Union City, Upper Big Rapids, Vassar, Vickeryville, West Frankenmuth.

DAIRY INSPECTIONS.

Report of dairies inspected during the month of March:

At Colon:

Geo. Wattles—Number of cows, 10; condition, good; feed, hay stover, and corn-meal; stables, good and clean; fair ventilation; yard, fairly dry and clean; water, well.

Geo. Baad—Number of cows, 10; condition, good; feed, hay, cornstalks, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.

Andrew Jackson—Number of cows, 12; condition, good; feed, hay, corn-fodder and corn; stables, good and clean; fair ventilation; yard, dry and clean; water, well.

Farrand Bros.—Number of cows, 20; condition, good; feed, hay, stover and corn-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.

S. Y. Bower—Number of cows, 15; condition, good; feed, hay, cornfodder and corn-meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.

At Comstock:

Knapp Bros.—Number of cows, 22; condition, good and clean; feed, hay, corn-stalks, bran, ground corn and oats; stables, fair and clean; fair ventilation; yard, dry and clean; water, well.

At Glendale:

- R. Cowen—Number of cows, 7; condition, good; feed, hay, stover, ground corn and oats; stables, fair; fair ventilation; yard, dry and fairly clean; water, well.
- L. J. Thompson—Number of cows, 7; condition, good; feed, hay, millet, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- J. Huffman—Number of cows, 7; condition, good; feed, hay, ground corn and oats; stables, fair and fairly clean; ventilation fair; yard, dry and clean; water, well.
- Mrs. A. V. Mumford—Number of cows, 8; condition, good; feed, hay, ground corn and oats; stables, poor, will improve; yard, fair; ventilation, poor; water, well.
- J. M. Robertson—Number of cows, 14; condition, good and clean; feed, hay, stover, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. A. Robertson—Number of cows, 10; condition, good and clean; feed hay, stover, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- H. A. Prentice—Number of cows, 32; condition, good; feed, hay, stover, no grain; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- A. A. Graves—Number of cows, 7; condition, good; feed, hay, ground corn and oats; stables, fair; poor ventilation; yard, fair; water, well.

At Gobleville:

- H. Mooney—Number of cows, 8; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- H. Goble—Number of cows, 9; condition, good; feed, hay, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- A. Shaw—Number of cows, 8; condition, good; feed, hay, stover, gluten, ground corn and oats; stables, temporary but clean; yard, dry and clean; water, well and spring.
- J. J. Miller—Number of cows, 7; condition, good; feed, stover, ground corn, oats and wheat; stables, fair and fairly clean; yard, fair; ventilation, fair; water, well.
- J. Houskincht—Number of cows, 10; condition, good; feed, hay, stover, ground corn and oats and bran; stables, good and clean; yard, dry and clean; water, well.
- J. L. Clement—Number of cows, 10; condition, good; feed, hay and corn-meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.

- L. S. Lee—Number of cows, 12; condition, good; feed, hay, corn-meal and bran; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Hodgeman—Number of cows, 7; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- J. O. Shryock—Number of cows, 9; condition, good; feed, hay, ground corn and oats and bran; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. Post—Number of cows, 7; condition, good; feed, hay, corn-meal and bran; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- C. Babcock—Number of cows, 8; condition, good; feed, hay, ground corn and oats; stables, good and clean; good ventilation; yard, dry and fairly clean; water, well.
- C. W. Ashbrook—Number of cows, 7; condition, good; feed, hay, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- B. May—Number of cows, 8; condition, good; feed, hay, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, well.
- R. Jennings—Number of cows, 15; condition, good and clean; feed, hay, ensilage and corn-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Breed—Number of cows, 15; condition, good; feed, hay, corn-fodder, corn-meal and bran; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, well.
- O. P. Ketchum—Number of cows, 11; feed, hay, stover, corn-meal; stables, good and clean; good ventilation; yard, dry and fairly clean; water, well.

Perry Slade—Number of cows, 7; condition, good; feed, hay, corn-meal and bran; stables, fair and fairly clean; yard, fair; water, well.

M. Staten—Number of cows, 7; condition, good; feed, hay, stover, corn-meal and bran; stables, good and fairly clean; good ventilation; yard, dry and clean; water, well.

Royal Stevenson—Number of cows, 8; condition, good; feed, hay, cornstalks and corn-meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.

- E. U. Brown—Number of cows, 7; condition, good; feed, hay and cornmeal; stables, good and clean; fair ventilation; yard, dry and clean; water, spring.
- B. Carpenter—Number of cows, 8; condition, good; feed, hay, cornfodder, no grain; stables, good and fairly clean; fair ventilation; yard, dry and clean; water, well.

At Homer:

- J. Sharp—Number of cows, 10; condition, good; feed, hay, corn-stalks and corn-meal; stables, good and fairly clean; good ventilation; yard, dry and clean; water, well.
- C. G. Jones—Number of cows, 20; condition, good; feed, hay, cornfodder, bran and corn-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- Geo. Brockway—Number of cows, 8; condition, good; feed, hay, stover, corn-meal, bran and buckwheat middlings; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, well.

Thomas Smith—Number of cows, 11; condition, good; feed, hay, cornstalks and corn-meal; stables, fair and fairly clean; good ventilation; yard, dry and clean; water, well.

Frank Vandeberg—Number of cows, 16; condition, good; feed, hay, corn-fodder and corn; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- U. Marteene—Number of cows, 8; condition, good; feed, hay, cornstalks, ground corn and oats; stables, fair and fairly clean; good ventilation; yard, dry and clean; water well.
- H. O. Cook—Number of cows, 24; condition, good but not clean; feed, hay, corn-stalks, corn-meal and bran; stables, fair and fairly clean; good ventilation; yard, dry and clean; water, well.

Tom Goldup—Number of cows, 10; condition, good; feed, hay, cornstalks and corn-meal; stables, good and fairly clean; fair ventilation; yard, dry and clean; water, well.

- J. S. Linton—Number of cows, 11; condition, good; feed, hay, cornstalks and corn-meal; stables, good and clean; fair ventilation; water, well.
- H. T. Dunn—Number of cows, 13; condition, good; feed, hay, cornfodder and corn-meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- J. A. Nichols—Number of cows, 9; condition, good; feed, hay, cornstalks and corn-meal; stables, good and fairly clean; good ventilation; yard, dry and clean; water, well.

At Jonesville:

Lloyd Chilson—Number of cows, 11; condition, good; feed, hay, stover, and corn-meal; stables, fairly good; fair ventilation; yard, dry and clean; water, well.

O. Chilson—Number of cows, 10; condition, good; feed, hay, stover and corn-meal; stables, good and clean; good ventilation; yard, fairly clean; water, well.

Martin Bliss—Number of cows, 6; condition, fair; feed, hay, cornstalks, middlings and corn-meal; stables, poor; poor ventilation; yard, fairly clean; water, well.

- H. Miller—Number of cows, 10; condition, good; feed, hay, cornfodder, corn and cob-meal and bran; stables good and fairly clean; fair ventilation; yard, dry and clean; water, well.
- M. L. Taber—Number of cows, 9; feed, hay, corn-stalks and corn-meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- A. H. Dudley—Number of cows, 20; condition, good and clean; feed, hay, stover, bran and corn-meal; stables, good and clean, making many fine improvements; yard, dry and clean; water, well.

At Kalamazoo:

Jay Gibbs—Number of cows, 17; condition, good and clean; feed, hay, corn-stalks, bran and corn-meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.

- R. C. Balch—Number of cows, 19; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean; good ventilation; yard, fair; water, well.
- D. C. Williams—Number of cows, 8; condition, good; feed, hay, cornstalks, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. H. Newton—Number of cows, 14; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- O. J. DeLano—Number of cows, 9; condition, good and clean; feed, hay, stover, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- C. E. Webster—Number of cows, 9; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.

Chenery Bros.—Number of cows, 26; condition, good; feed, hay, cornstalks, ground corn and oats; stables, temporary and clean; yard, dry and clean; water, well.

- B. Huggett—Number of cows, 8; condition, good; feed, hay, cornstalks and corn-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- A. L. Burroughs—Number of cows, 16; condition, good; feed, hay, ensilage, ground corn and wheat; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- G. E. Burroughs—Number of cows, 12; condition, good; feed, hay, ensilage, corn-meal and middlings; stables, good and clean; good ventilation; yard, dry and fairly clean; water, well.

Caleb Patterson—Number of cows, 14; condition, good; feed, stover, corn-meal and bran; stables, temporary but clean; yard, dry and clean; rater, well.

- F. Hipp—Number of cows, 8; condition, good; feed, hay, stover, beetpulp, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- I. Buse—Number of cows, 11; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- N. McWegar—Number of cows, 16; condition, good and clean; feed, hay, corn-stalks, ensilage, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.

Harry Miner—Number of cows, 7; condition, good and clean; feed, hay, corn-stalks, bran and corn-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.

Martin Haas—Number of cows, 15; condition, good and clean; feed, hay, corn-stalks, bran, corn-meal and oil-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- H. E. Smith—Number of cows, 13; condition, good and clean; feed, hay, stover, corn-meal, bran and sugar beets; stables, good and clean; fair ventilation; yard, dry and clean; good drainage; water, well.
- K. N. Sherwood—Number of cows, 16; condition, good; feed, hay, stover, corn-meal and bran; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, well.
- W. T. O'Brine—Number of cows, 14; condition, good and clean; feed, hay, ground corn and oats; stables, rebuilding with all improvements; yard, dry and clean; water, well.

John DenBleyker—Number of cows, 15; condition, good and clean; feed, hay, stover, corn-meal bran and gluten; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- E. W. Vosburg—Number of cows, 11; condition, good and clean; feed, hay, stover, bran and gluten; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- W. B. Vosburg—Number of cows, 7; condition, good and clean; feed, hay, stover, bran and gluten; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

Mrs. Wm. E. Hill—Number of cows, 17; condition, good and fairly clean; feed, corn-stalks, ensilage and bran; stables, good and clean; good ventilation; yard, fair; water, well.

E. Stevens—Number of cows, 20; condition, good; feed, hay, stover, corn-meal and bran; stables, poor; fair ventilation; yard, dry and clean; water, well.

L. Gibbs—Number of cows, 14; condition, good; feed, hay sugar beets, ground corn and oats; stables, good and clean; fair ventilation; yard, fair; water, well.

- J. M. Burt—Number of cows, 14; condition, good and clean; feed, hay, stover, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. A. Maxon—Number of cows, 25; condition, good; feed, hay and corn-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.

Michigan Insane Asylum—Number of cows, 45; condition, good and clean, a fine herd; feed, hay, ensilage and bran; stables, new, good and clean, nicely arranged with silo rock cellar and a good ventilation; yard, dry and clean; good drainage; water, well.

- J. W. Osborn—Number of cows, 32; condition, good and clean; feed, hay, corn-stalks, bran, corn-meal and mangles; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, spring.
- Wm. S. Foster—Number of cows, 14; condition, good and clean; feed, hay, stover, bran and corn-meal; stables, good and clean; fair ventilation; yard, dry and clean; water, spring.

John Farley—Number of cows, 7; condition, good; feed, hay, cornstalks, bran and corn-meal; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, spring.

- G. W. Cranmer—Number of cows, 21; condition, good and clean; feed, hay, corn-meal and sugar beets; stables, fair and clean; fair ventilation; yard, fair; water, spring.
- F. E. Cook—Number of cows, 7; condition, good and clean; feed, hay, stover, bran and gluten; stable, good and clean; good ventilation; yard, dry and clean; water, well.
- C. W. Hudson—Number of cows, 14; condition, good and clean; feed, hay, stover, bran and corn-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. F. Schlobohm—Number of cows, 10; condition, good and clean; feed, hay, stover, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and fairly clean; water, well.
- C. E. Lewis—Number of cows, 10; condition, good and clean; feed, hay, stover, gluten, bran and middlings; stable, good and clean; good ventilation; yard, dry and clean; water, well.
- H. E. Washburn—Number of cows, 25; condition, good and clean; feed, hay, ensilage, stover, ground corn and oats and oat-meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- H. H. Mulder—Number of cows, 28; condition, good and clean; feed, hay, stover, ground corn and oats, bran and oil-meal; stable, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

State Asylum Brook Farm—Number of cows, 55; condition, extra good and clean, a fine herd; feed, hay, stover, ensilage, bran and mangles; stable, neat, clean and nicely arranged with good system of ventilation; yard, dry and clean; good drainage; water, spring.

- W. E. Oakley—Number of cows, 20; condition, good and clean; feed, stover, corn-meal and bran; stable, good and clean; good ventilation; yard, dry and clean; water, well.
- T. M. Robe—Number of cows, 24; condition good; feed, bean-straw, ensilage, bran and corn-meal; stable, fair and fairly clean; good ventilation; yard, dry and clean; water, spring.

John Daster—Number of cows, 20; condition, fair; feed, hay, stover, ground corn and oats; stable, fair and fairly clean; yard, dry and clean; water, spring.

N. H. DeLano—Number of cows, 7; condition, good and clean; feed, hay, stover, bean-straw, ground corn and oats; stable, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

Barrett Bros.—Number of cows, 28; condition, good and clean; feed, hay ensilage and corn-meal; stable, good and clean; good ventilation; yard, dry and fairly clean; water, well.

Fred DeLano—Number of cows, 9; condition, good and clean; feed, hay, stover, bran, ground corn and oats and wheat; stable, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

Peter Campbell—Number of cows, 17; condition, good and clean; feed, hay, stover, ground corn and oats; stable, good and clean; good ventilation; yard, dry and fairly clean; water, well.

- W. S. Rockwell—Number of cows, 19; condition, good and clean; feed, hay, ensilage, bran and corn-meal; stable, good and clean; good ventilation; yard, dry and clean; water, well.
- L. H. Stafford—Number of cows, 7; condition, good and clean; feed, hay, ground corn and oats and mangles; stables, good and clean; good ventilation; yard, dry and clean; water, well.

Colony Farm, State Property—Number of cows, 30; condition, good and clean; feed, hay, ensilage, bran and roots; stable, extra good, with good ventilation; yard, dry and clean; water, well.

Geo. Drake—Number of cows, 36; condition, good and clean; feed, hay, stover, ground corn and oats; stable, good and clean; good ventilation; yard, dry and clean; water, well.

At Parma:

- Geo. Egleston—Number of cows, 19; condition, good; feed, hay, ensilage, bran, ground corn and rye; stable, good and clean; good ventilation; yard, dry and clean; water, well.
- W. L. Burruss—Number of cows, 12; condition, good; feed, hay, cornstalks, bran. ground corn and oats; stable, good and clean; fair ventilation; yard, dry and clean; water, well.
- F. Hartung—Number of cows. 19; condition, good; feed. hay, cornstalks, millets, ground corn and oats; stable, good and clean; good ventilation; yard, fair and fairly clean; water, well.

Joe Johnson—Number of cows, 10; condition, good; feed, hay, cornstalks, bran, ground corn, rye and barley; stable, good and clean; fair ventilation; yard, dry and clean; water, well.

- J. D. Miner—Number of cows, 15; condition, good; feed, hay, cornmeal; stable, fair and fairly clean; good ventilation; yard, dry and fairly clean; water, well.
- E. M. Foster—Number of cows, 20; condition, good and clean; feed, hay, corn-stalks and corn-meal; stable, good and clean; fair ventilation; yard, dry and fairly clean; water, well.
- C. H. Adams—Number of cows, 10; condition, good; feed, hay, cornstalks, bran and corn-meal; stable, fairly good and clean; good ventilation; yard, dry and clean; water, well.
- Geo. Needham—Number of cows, 25; condition, good and clean; feed, hay, corn-stalks, ground corn and oats; stable, good and clean; good ventilation; yard, dry and clean; water, well.
- F. Hicks—Number of cows, 12; condition, good; feed, hay, corn-stalks and corn-meal; stable, good and clean; good ventilation; yard, dry and clean; water, well.
- D. F. Richardson—Number of cows, 12; condition, good; feed, hay, corn-stalks and corn-meal; stable, good and clean; good ventilation; yard, dry and fairly clean; water, well.
- L. R. Roosbeck—Number of cows, 14; condition, good; feed, hay, cornstalks, bran and corn-meal; stable, good and clean; good ventilation; yard, dry and clean; water, well.
- T. H. Fenmore—Number of cows, 8; condition, good; feed, hay, cornstalks, ground corn and oats; stable, good and clean, cement floor; good ventilation; yard, dry and fairly clean; water, well.

Sam Foster—Number of cows, 20; condition, good; feed, hay, cornstalks, ground corn and oats; stable, good and clean; good ventilation; yard, dry and fairly clean; water, well.

- C. E. Mackey—Number of cows, 10; condition, good; feed, hay, cornstalks, ground corn and oats; stable, fairly good; fair ventilation; yard, dry and fairly clean; water, well.
- F. C. Harrington—Number of cows, 25; condition, good; feed, hay, stover, corn-meal and malt sprouts; stable, good and clean; good ventilation; yard, dry and clean; water, well.
- T. A. King—Number of cows, 14; condition, good; feed, hay, cornstalks and corn-meal; stable, fair and fairly clean; good ventilation; yard, dry and clean; water, well.

At Portage:

Cutler Bros.—Number of cows, 17; condition, good; feed, hay, stover, bran, ground corn and wheat; stable, good and clean; ventilation, good; yard, dry and fairly clean; water, well.

M. J. O'Neal—Number of cows, 13; condition, good; feed, hay and form-meal; stable, fair and fairly clean; good ventilation; yard, dry and form clean; water, well.

Chas. Beckley—Number of cows, 11; condition, good; feed, hay and corn-meal; stable, fair and fairly clean; fair ventilation; yard, dry and clean; water, well.

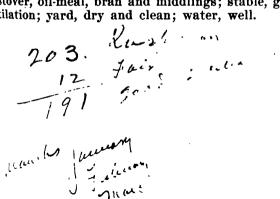
A. Snow—Number of cows, 23; condition, good and clean; feed, hay, bran, ground corn and oats; stable, good and clean; good ventilation; yard, dry and clean; water, well.

At Union City:

- Geo. A. Moodey—Number of cows, 22; condition, fair and fairly clean; feed, hay, stover, ground corn and oats; stable, fair, not clean; fair ventilation; yard, dirty; water, well.
- E. E. Bostwick—Number of cows, 26; condition, good and clean, a fine herd; feed, ensilage stover, sugar beets and corn-meal; stable, good and clean; good ventilation; yard, dry and clean; water, well.
- J. F. McCausey—Number of cows, 11; condition, good; feed, hay, stover, corn and cob-meal; stable, fairly good and clean; fair ventilation; yard, dry and fairly clean; water, well.

James Martin—Number of cows, 14; condition, good; feed, hay, cornfodder and corn-meal; stable, good and clean; fair ventilation; yard, dry and fairly clean; water, well.

- T. H. London—Number of cows, 12; condition, good; feed, hay, cornstalks and corn-meal; stable, good and fairly clean; good ventilation; yard, dry and fairly clean; water, well.
- C. W. Hasman—Number of cows, 20; condition, good; feed, hay, stover, oil-meal, bran and middlings; stable, good and clean; good ventilation; yard, dry and clean; water, well.



ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

- 1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;
- 2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;
- 3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;
 - 4. If it is in imitation of, or is sold under the name of another article;
- 5. If it consist wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;

- 6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;
- 7. If it contains any added substance or ingredient which is poisonous or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

- 1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;
 - 2. They must contain nothing injurious to health;
- 3. They must not be sold in imitation of, or under the name of another article:
- 4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound;
- 5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

BAKING POWDER.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter.

CANDY.—Must not contain terra alba, barytes, tale, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

CATSUP.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream

Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee, whether put up for immediate delivery or for stock purposes.

COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing the same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATE AND COCOA.—If containing no other substances than cocoa mass, sugar and flavoring, will not be classed as a compound or mixture.

CANNED GOODS.—Must bear name and address of the packer. If dried before canning must be labeled "Soaked or Bleached Goods," in letters not less than two line pica in size. The sale of peas or other vegetables greened with copper is prohibited.

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper, and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FARINACEOUS GOODS.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats; Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound, under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

HONEY.—Must be pure. Cannot be mixed with glucose or other substances and sold as "Honey Compound."

JELLY.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

LARD.—Imitation lard in manufacturers' packages must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and

every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

LIQUOR.—Spirituous, fermented or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.

MAPLE SUGAR AND MAPLE SYRUP.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

MILK.—Must contain not less than 3 per cent of fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives in milk is prohibited.

MOLASSES.—Must be branded with its true and appropriate name and must be true to same. (See Syrup.)

OLEOMARGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter, or calculated to be used as or for butter, must be known and designed as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words, "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary bold-faced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica

in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANCAKE FLOUR.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

PEPPER.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and

shall contain not more than ten per cent nor less than six and one-half per cent of nonvolatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard," and bear the name and address of the manufacturer, but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard," and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them plain and prominent.

Syrup.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose, shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture," and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package to be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

1902 WYNKOOP HALLENBECK CRAWFORD CO. OF LANSING, MICH. STATE PRINTERS

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

W.B. SNOW, -	-	-	-	-	-	-	Commissioner
PERLEY C. HEALD,		-	-	-	-	DEPUTY (Commissioner
R. E. DOOLITTLE.	_	_	_	_	_	- ST	ATE ANALYST

REGISTRATION OF CHEESE FACTORIES AND CREAMERIES.

In this issue of the bulletin will be found a complete list of the cheese factories and creameries of the State registered with the Department for the registration year beginning April 1, 1902.

WARNING AGAINST, USE OF PRESERVATIVES IN MILK, ETC.

The attention of milk peddlers and all other dealers in milk and cream is called to Act No. 106, Public Acts, 1899, which prohibits the use of all preservatives in milk or cream. The act complete is as follows:

"Section 1. No person shall offer or expose for sale, exchange or deliver, or have in his possession with intent to sell, exchange or deliver, any milk to which water, chemicals or preservatives, or any other foreign substance, has been added. The term milk as used in this act shall include all skimmed milk, butter milk, cream and milk in its natural state, as drawn from the cow.

SEC. 2. Whoever shall do any of the acts or things prohibited, or neglects or refuses to do any of the acts or things enjoined by this act, or in any way violates any of its provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than one dollar nor more than one hundred dollars and the costs of prosecution, or by imprisonment in the county jail not more than ninety days, or by both such fine and imprisonment, in the discretion of the court."

CHEESE FACTORY AND CREAMERY REGISTRATION.

(Extracts from Act No. 193, Public Acts, 1895.)
(As amended by Act No. 118, Public Acts, 1897.)

(C. L., 5015.) Sec. 6. Every manufacturer of full milk cheese may put a brand upon each cheese, indicating "Full milk cheese," and no person shall use such a brand upon any cheese made from milk from which any of the cream has been taken. It shall be the duty of the proprietor of every cheese factory, creamery or butter factory in the State where milk or cream is purchased of or contributed by three or more persons, to register the location of such cheese factory, creamery or butter factory, and the name of its owner or manager with the Dairy and Food Commissioner on or before the first day of October, A. D. eighteen hundred ninety-seven, and on or before the first day of April in each year thereafter. Whoever violates any of the provisions of this section, in so far as it relates to registration, shall be deemed guilty of a misdemeanor, and for each and every offense shall be punished by a fine of not less than five dollars nor more than twenty-five dollars and the costs of prosecution, or by imprisonment in the county jail for not more than thirty days or both.

(C. L., 5016.) Sec. 7. The Dairy and Food Commissioner shall procure and issue to the cheese manufacturers of the State, on proper application, which application shall be made on or before the first day of October, A. D. eighteen hundred ninety-five, and on or before the first day of April in each year thereafter, and under such regulation as to the custody and use thereof as he may prescribe, a uniform stencil brand, bearing a suitable device or motto, and the words "Michigan full cream cheese." Every such brand shall be used on the outside of the cheese, and upon the package containing the same, and shall bear a separate number for each separate factory. The said commissioner shall keep a book in which shall be registered the name, location and number of each manufactory using the brand, and the name or names of persons at each factory authorized to use the same. No such brand shall be used on other than full cream cheese or packages containing the same. The commissioner shall receive a fee of one dollar for each registration, said fee to be paid by the party applying for the same, which amount shall be accounted for and used as a part of the fund appropriated for the enforcement of the laws of this State with which the Dairy and Food Commissioner is charged.

(C. L., 5017.) Sec. 8. No person shall knowingly offer, sell or expose for sale, in any package, cheese which is falsely branded or labeled.

CHEESE REGISTRATION.

[Registered with privilege to use the "Michigan Full Cream Cheese" brand from April 1, 1902, to April 1, 1903.

ALLEGAN COUNTY.

Brand No. 22. 23. 3.	Name of factory. Moline Cheese Factory, Spring Hill Cheese Factory, Springdale Cheese Factory,	Location and Postoffice address. Moline, Hopkins Station, Hopkins Station,	Owner and manager. E. N. Bates. Miller & Leggett. M. W. Hicks.
		BAY COUNTY.	
65. 29.	Monitor No. 65, Berger's Brick Cheese Fac.,	Monitor, Auburn R. 1, Amelith, W. Bay City,	Lounsberry & Voss.
	Deiger a Direx Oncese Pac.,	R. 2,	John Berger.
		CASS COUNTY.	
32 .	Silver Creek Factory,	Cushing,	Silver Creek Dairy Co.
	CL	INTON COUNTY.	
24.	Eagle Cheese Factory,	Eagle	J. H. Fish.
	GE	NESEE COUNTY.	
14.	State Road Cheese Factory,	Vienna, Clio,	O. M. Field.
	. HIL	LSDALE COUNTY.	
62.	Camden Cheese Factory,	Camden,	O. D. Chester.
17. 82.	Bennett Cheese Factory, Blackmar Cheese Factory,	Wheatland, Hudson, Blackmar,	O. F. Foster. S. A. Sutherland.
69.	Pittsford Cheese Co. Ltd.,	Pittsford,	F. R. Kedzie.
	н	URON COUNTY.	
33.	Port Hope Cheese Factory,	Port Hope,	S. T. Jones.
	К	ENT COUNTY.	•
84.	Caledonia Cheese Mfg. Co.,	Caledonia,	N. Clark.

LENAWEE COUNTY.

	•		
Brand No. 11. 86. 77. 30.	Name of factory. Medina Cheese Factory, Clayton Cheese Factory, Rollin Cheese Factory, Hudson Cheese Factory, Riverside Cheese Factory,	Location and Postoffice address. Medina, Clayton, Rollin, Hudson, Riverside, Adrian,	Owner and manager. C. C. Colvin & Co. C. C. Colvin & Co. B. L. Peebles. D. W. Rhead & Co. E. L. Baker.
	MII	DLAND COUNTY.	
44.	Midland Cheese Factory,	Норе,	Wm. C. Schearer.
	MO	ONROE COUNTY.	
60. 67. 59.	Milan Cheese Factory, LaSalle Cheese Factory, Dundee Cheese Factory,	Milan, La Salle, Monroe, Dundee,	John Wise. Chas. E. Kirby. Smith & Dixon.
	MON	TCALM COUNTY.	
4 5.	Butternut Cheese Factory,	Butternut,	J. M. Fitzpatrick.
	OT	TAWA COUNTY.	
7.	Zeeland Cheese Factory,	Zeeland,	S. Bouwers.
	SAC	GINAW COUNTY.	
37.	Union Cheese Mfg. Co.,	Frankonmuth	
47.	Chapin Cheese Factory, Buena Vista Cheese Co.,		John Nuechterlein. Geo. C. Peters.
21. 13.	Frankentrost Cheese Co.,	Saginaw R. 2, Blumfield, Saginaw R. 2.	John Leidlein. F. C. Moll.
	,		
	SHIA	WASSEE COUNTY.	•
28.	Laingsburg Cheese Co.,	Laingsburg,	Stoney & Bennett,
	TU	SCOLA COUNTY.	
68. 1.	Tuscola Cheese Factory, Arbela Cheese Co.,	Tuscola, Arbela, Clio,	G. W. Dimond. J. A. Picket.
	VAN	BUREN COUNTY.	
16.	Base Line Cheese Factory,	Bloomingdale,	Lynn Reid.
	W.	AYNE COUNTY.	
50.	Waltz Cheese Factory,	Waltz,	Waltz & Ziegler.
	WASI	HTENAW COUNTY.	
56.	Excelsior Cheese Factory,	Willis, box 62,	Harvey S. Day.
	•		• •

. 1

OTHER CHEESE FACTORIES REGISTERED APRIL 1, 1902.

Name. Louis Hildebrand. Mrs. Ida A. Mankin, Michigan Mfg. & Mct'l Co., Johnson & Love, T. T. Goodfellow, Leroy T. Smith, Silas Davis, Jr., Eugene Jenkins, C. G. Switzer. Philips & Chapin. D. A. Jenkins, Baker & Sortar, Fitzpatrick & Guild. J. M. Beddow, A. D. Power & Son. Fred M. Warner, Fred M. Warner, Fred M. Warner, Fred M. Warner, Geo. N. Fisher, L. Hubinger, E. G. Fox & Son. Chas. Reitz, E. A. Haven, Fred M. Warner, Fred M. Warner,

Location, County. Allegan. Allegan, Arenac. Clinton, Genesee. Hillsdale, Jackson, Lenawee. Livingston. Mecosta, Monroe. Monroe. Montcalm, Oakland, Oakland, Oakland, Oakland, Oakland, Oakland, Saginaw, Saginaw, Tuscola, Tuscola, Van Buren. Wayne, Wayne,

North Dorr. Hopkins. Standish. Shepardsville. Grand Blanc. Addison. Liberty. Rome Center. Hamberg. Remus. Grape. Strasberg. Carson City. Beddow. Northville. Farmington. Farmington. Farmington. Farmington. Birch Run. Frankenmuth. Mayville. Mayville. Bloomingdale. Farmington. Farmington.

Postoffice address.

CREAMERIES REGISTERED APRIL 1, 1902.

ALLEGAN COUNTY.

Name.
Bradley Creamery Co.,
Dorr Creamery Co.,
Martin Creamery Co.,
Monterey Creamery,
The Hilliards Creamery Co.,

Location.
Bradley,
Dorr,
Martin,
Monterey,
Hilliards,

Owner or manager. S. S. Fox. E. S. Botsford. A. C. Monteith. H. H. Stroud. H. E. Parmelee.

BARRY COUNTY.

Freeport Creamery Co., Nashville Creamery Co., Woodland Creamery Co., Freeport, Nashville, Woodland, Freeport Creamery Co. C. W. Smith. B. S. Holly.

BERRIEN COUNTY.

Galien Creamery Co., Ltd., Pipestone Jersey Creamery, Three Oaks Creamery Co. Galien, Pipestone, Three Oaks, E. A. Blakeslee. Geo. T. Yetter. H. P. Becker.

CALHOUN COUNTY.

Homer Branch Litchfield Butter Co., Homer,

C. N. Holkins.

CLINTON COUNTY.

Name. Westphalia Creamery Go., Looking Glass Creamery, Maple River Creamery, Location.
Westphalia,
DeWitt,
Ovid,

Owner or manager. Anthony P. Arens. Luther W. Sibley. A. M. Smith & Co.,

EATON COUNTY.

Vermontville Creamery Co.,

Vermontville,

D. H. Brown.

GENESEE COUNTY.

Genesee Butter Factory, Goodrich Creamery. Grand Blanc, Goodrich, L. W. Campbell. W. A. Cook.

HILLSDALE COUNTY.

Camden Creamery, Litchfield Butter Co., Camden, Litchfield, O. D. Chester. C. N. Holkins.

ISABELLA COUNTY.

Shepherd Creamery Co.,

Shepherd,

C. H. Jones.

JACKSON COUNTY.

Parma Butter Co.,

Parma,

Geo. D. Eggleston.

KALAMAZOO COUNTY.

Alamo Valley Creamery Co.,

Alamo,

M. F. Bachelder, Sec.

LENAWEE COUNTY.

Hudson Creamery Co., Reed Farm Creamery, Cadmus Creamery, Locust Farm Creamery, Tecumseh Creamery,

Hudson, Cadmus, Cadmus, Adrian, Tecumseh, H. E. Loyster, Sec. J. H. Sword. L. McLouth & Son. A. B. Graham. Edward Mott & Co.

MACOMB COUNTY.

Richmond Creamery, New Baltimore Creamery Co., Richmond, New Baltimore, G. M. Grennis. Chris Schlosser, Mgr.

MONROE COUNTY.

Monroe Butter & Cheese Factory, Excelsior Creamery Co., S. Rockwood Butter & Cheese Co.,

Monroe, Ida, South Rockwood, Andrew Vivian. W. G. Hoffman. J. W. Harris, Sec.

MONTCALM COUNTY.

Lakeview Creamery,

Lakeview,

C. M. Northrop.

OCEANA COUNTY.

Oceana Creamery,

Montague,

E. M. Fuller, J. H. Conrad.

 $\mathsf{Digitized} \ \mathsf{by} \ Google$

OSCEOLA COUNTY.

Name. Location.
Cooperative Butter & Cheese Ass'n, Evart,

Owner or manager. Wm. Vance.

OTTAWA COUNTY.

Crisp Creamery, Cooperative Creamery, Hudsonville Creamery Ass'n, Allendale Creamery. Crisp, Coopersville, Hudsonville, Allendale, W. Nienhuis. F. P. Peck. R. P. Cory. Mrs. E. C. Pierson.

SAGINAW COUNTY.

Gera Creamery,

Gera,

John M. Geyer.

SANILAC COUNTY.

Maple Valley Creamery, Maple Valley,

Brown City, Marlette, Asa E. Piper. A. E. Piper.

SHIAWASSEE COUNTY.

Vernon Creamery,

Vernon,

P. E. Kirkham.

ST. CLAIR COUNTY.

St. Clair Creamery Co.,

St. Clair,

J. F. Ruff, Chas. H. Otter.

TUSCOLA COUNTY.

Caro Elgin Butter Co., Vassar Creamery, Caro, Vassar, W. H. Bechtel. Wm. C. McKenzie.

WASHTENAW COUNTY.

Ypsilanti Dairy Ass'n,

Ypsilanti,

H. D. Platt.

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1901.

Cases pending July 1, 1901 Cases commenced since said date Cases nolle prossed		56 64 43
CASE	S DISPOSED OF.	
Before Examining Magistrates 39	Defendants bound over to trial courts	39 0
In Trial Courts 39	Defendants convicted	37 2
Cases pending May 1, 1902		38

PROCEEDINGS HAD DURING THE MONTH OF APRIL.

Complaint was made April 9, in justice court of the city of Port Huron, against Thos. S. Linn of Algonac, charged with selling oleomargarine for butter. Defendant waived examination and was bound over to the circuit court of the county of St. Clair for trial.

Complaint was made April 10, in police court of the city of Port Huron, against John Monsell, representing the Dow & Snell Co. of Toledo, Ohio, charged with selling adulterated jelly. Defendant was arrested and entered a plea of not guilty.

Complaint was made April 16, in justice court of the city of Saginaw, against John Doerr, charged with selling oleomargarine artificially colored. Examination was commenced April 30 and continued until May 14

Complaint was made April 16, in justice court of the city of Saginaw, against Robert J. Brown and David C. Goodell doing business as Brown & Goodell, charged with selling oleomargarine artificially colored. Examination was commenced April 30 and continued until May 13.

Complaint was made April 17, in justice court of the city of Saginaw, against Alexander D. Phillipe charged with selling oleomargarine artificially colored. Examination was commenced April 30 and continued until May 13.

In the case pending in the circuit court of the county of Ottawa against Cornelins M. Phernambucq of the city of Grand Haven, charged with selling colored oleomargarine April 12, defendant was convicted. Stay of sentence granted until August term of court pending an appeal to the supreme court.

The case pending in the circuit court of the county of Ottawa against John M. Cook of the city of Grand Haven, charged with selling colored oleomargarine, was on the 12th inst. continued until the next term of court pending a decision in the supreme court in case of People vs. Cornelius M. Phernambucq.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., April 30, 1902.

Hon. W. B. Snow, Dairy and Food Commissioner:

Sir—During the month of April, 42 samples of food products have been examined, 6 being pure and 36 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Butter	4 1 1	1	3
Lard. Mustard (prepared). Mustard (prepared). String beans	1 1 20 1	i	1 20
Vinegar Totals	42	6	36

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

BUTTER.

No. U-32. Sample of "Sheaf Brand No. 1 Northern Butter" from Finnish Trading Co., Wolverine Mine.

Sold by Crescent Creamery, St. Paul, Minn.

Producer, Crescent Creamery, St. Paul, Minn.

Sample is process butter.

No. R-135. Sample of butter from C. M. Gibberty, Algonac, Mich.

Sold by Thos. S. Guin, Algonac, Mich.

Sample is oleomargarine.

No. L-253. Sample of butter ("Elgin Quality Improved Creamery Process") from Lewis Way, Rapid City.

Sold by Branch office Saginaw Beef Co., Traverse City, Mich.

Not properly labeled.

EXTRACTS.

No. S-166. Sample of "Wreath Brand Extract of Vanilla" from The Chandler Co., Detroit.

Producer, J. P. Deiter Co., Chicago, Ill.

Vanillin	0.143 per cent.
Coumarin	0.021 " "
Vanilla resin	None to trace.
Organic acids, gums, etc	
Color	

An extract of tonka containing added vanillin and foreign coloring matter.

Because of incorrect information given the inspector when sample was taken, the "Globe Extract Tonka-Vanilla" published in the March bulletin was stated to have been sold by Steele-Wedeles Co.; when it should have been by Puhl-Webb Co., Chicago, Ill.

JELLY.

No. R-136. Sample of "Fruit Jelly, Imitation Plum" from Frank Wolfstyn, Port Huron.

Sold by The Dow & Snell Co., Toledo, Ohio.

 Producer, Exley Watkins & Co., Wheeling, W. Va.

 Water
 41.30 per cent.

 Ash
 0.45 " "

 Reducing sugar
 28.33 " "

 Polarization before inversion
 +99.3 degrees.

 Polarization after inversion
 +99.2 "

 Starch
 Present.

An imitation fruit jelly artificially colored.

Artificial.

No. U-33. Sample of "Richelieu Fresh Fruit Jelly, Strawberry" from Matheson &

Johnson, Calumet. Sold by Sprague, Warner & Co., Chicago, Ill. Producer, Sprague, Warner & Co., Chicago, Ill. 35.29 per cent. Water 0.79 Ash Reducing sugar 45.58 Polarization after inversion-18.48 Saccharin Present. Starch Present. Color Artificial. Not pure strawberry jelly. No. U-34. Sample of currant jelly, "Telmo" brand, from Joseph Sotlich, Calumet. Sold by Franklin, McVeagh & Co., Chicago, Ill. Producer, Franklin, McVeagh & Co., Chicago, Ill. Water 30.68 per cent. 0.47 Reducing sugar 48.34 Polarization before inversion+11.0 degrees. Polarization at 86° C..... +6.0 Starch Present. Color Artificial. Not pure currant jelly. MUSTARD-(Prepared). No. U-36. Sample of "French Mustard," "Hiawatha" brand, from Bergen & Hill, Lake Linden. Sold by M. A. Gedney & Co., Minneapolis, Minn. Producer, M. A. Gedney & Co., Minneapolis, Minn. Total solids 26.62 per cent. Ash 3.24 Mustard Vinegar Spices and turmeric Not properly labeled. OLEOMARGARINE. No. R-128. Sample of oleomargarine ("Daisy" brand) from Joseph Valliere, So. Bay City. Producer, W. J. Moxley & Co., Chicago, Ill. Oleomargarine artificially colored. No. R-129. Sample of oleomargarine ("Purity" brand) from John Dorr, Saginaw, W. S.

No. R-131. Sample of oleomargarine from Brown & Goodell, Saginaw, E. S. Sold by A. M. Demuth & Co., Toledo, Ohio.

Producer, Ohio Butterine Co., Toledo, Ohio.

Oleomargarine artificially colored.

Sold by Michigan Produce Co., Detroit.

Oleomargarine artificially colored.

No. R-132. Sample of oleomargarine ("Eastlake" brand) from A. D. Phillipe, Saginaw, E. S.

Producer, Armour Packing Co., Hammond, Ind.

Oleomargarine artificially colored.

No. R-134. Sample of oleomargarine from Thos. S. Guin, Algonac.

Producer, Capitol City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. R-137. Sample of oleomargarine from Smith Bros., Port Huron.

Sold by Michigan Produce Co., Detroit.

Producer, G. H. Hammond Co., Hammond, Ind.

Olcomargarine artificially colored.

No. S-154. Sample of oleomargarine ("Purity" brand) from Root Doty, Detroit.

Sold by Michigan Produce Co., Detroit.

Producer, Capitol City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-155. Sample of oleomargarine ("Purity" brand) from Weyler Bros., Detroit.

Sold by Michigan Produce Co., Detroit.

Producer, Capital City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-156. Sample of oleomargarine ("Special" brand) from Maurice Malock, Detroit.

Producer, W. J. Moxley & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-157. Sample of oleomargarine ("Calumet" brand) from R. Sabler, Wyandotte.

Sold by Michigan Produce Co., Detroit.

Producer, G. H. Hammond Co., Hammond, Ind.
Oleomargarine artificially colored.

No. S-164. Sample of oleomargarine ("Purity" brand) from McMahon & McPharlin, Detroit.

Sold by Michigan Produce Co., Detroit.

Producer, Capital City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-165. Sample of oleomargarine ("Daisy" brand) from The Chandler Co., Detroit.

Producer, W. J. Moxley & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-167. Sample of oleomargarine ("Daisy" brand) from Emmett Merrill, Detroit.

Producer, W. J. Moxley & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-168. Sample of oleomargarine ("Daisy" brand) from Jas. Merrell & Bros., Detroit.

Producer, W. J. Moxley & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-169. Sample of oleomargarine ("Purity" brand) from L. W. Sawle, Farmington.

Sold by Michigan Produce Co., Detroit.

Producer, Capital City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-170. Sample of oleomargarine ("Special" brand) from J. Ascher, Detroit. Producer, W. J. Moxley & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-171. Sample of oleomargarine ("Purity" brand) from Eilbert Bros., Wyandotte. Sold by Michigan Produce Co., Detroit.

Producer, Capital City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-172. Sample of oleomargarine ("Purity" brand) from Chas. Wambier, Wyandotte.

Sold by Michigan Produce Co., Detroit.

Producer, Capital City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-173. Sample of oleomargarine ("Calumet" brand) from Chas Wambier, Wyandotte.

Sold by Michigan Produce Co., Detroit.

Producer, G. H. Hammond Co., Hammond, Ind.

Oleomargarine artificially colored.

No. U-31. Sample of oleomargarine from Jara & Keitha, Calumet.

Sold by Armour & Co., Chicago, Ill.

Producer, Armour & Co., Chicago, Ill.

Oleomargarine artificially colored.

VINEGAR.

Producer, Price & Lucas, Louisville, Ky.	
Specific gravity	1.0064
Acid as acetic	3.89 per cent.
Total solids	0.26 " "
Ash	0.03 " "
Color	Artificial.
Distilled vinegar colored and below the standard in acid stren	gth.

No. S-153. Sample of cider vinegar from C. W. Inslee & Co., Detroit.

No. S-158. Sample of cider vinegar.

Sold by The Edward Henkel Co., Detroit. Producer, Price & Lucas, Louisville, Ky.

Specific gravity	1.0074
Acid as acetic	4.27 per cent.
Total solids	
Ash	
Color	Artificial.

Distilled vinegar colored.

No. S-159. Sample of cider vinegar.

Sold by The Edward Henkel Co., Detroit.

Producer, Price & Lucas, Louisville, Ky.

Specific gravity	1.0074
Acid as acetic	4.29 per cent.
Total solids	0.15 '" "
Ash	0.004 " "
Color	Artificial.

Distilled vinegar colored.

No. S-160. Sample of cider vinegar. Sold by The Edward Henkel Co., Detroit. Producer, Price & Lucas, Louisville, Ky. Specific gravity Acid as acetic Total solids Ash Color Distilled vinegar colored and below the standard in acid strenges.	1.0062 3.62 per cent. 0.15 " " 0.006 " " Artificial. ngth.
No. S-161. Sample of cider vinegar. Sold by The Edward Henkel Co., Detroit. Producer, Price & Lucas, Louisville, Ky. Specific gravity Acid as acetic Total solids Ash Color Distilled vinegar colored. No. S-162. Sample of cider vinegar.	1.0074 4.29 per cent. 0.14 " " 0.009 " " Artificial.
Sold by The Edward Henkel Co., Detroit. Producer, Price & Lucas, Louisville, Ky. Specific gravity Acid as acetic Total solids Ash Çolor Distilled vinegar colored.	1.0074 4.20 per cent. 0.19 " " 0.018 " " Artificial.
No. S-163. Sample of cider vinegar. Sold by The Edward Henkel Co., Detroit. Producer, Price & Lucas, Louisville, Ky. Specific gravity Acid as acetic Total solids Ash Color Distilled vinegar colored. No. U-35. Sample of vinegar from T. H. Rule & Bro., Lake Sold by Michigan Cider Co., Chicago, Ill. Producer, Michigan Cider Co., Chicago, Ill. Specific gravity Acid as acetic	1.0074 4.32 per cent. 0.17 " " 0.015 " " Artificial. Linden, 1.0126 3.43 per cent.
Total solids Ash Below the standard in acid strength and ash.	2.14 " " 0.15 " "

INSPECTIONS.

The following places were visited by the Department's inspection

force during the month of April:

Algonac, Allegan, Allouez Mine, Alto, Calumet, Detroit, Escanaba, Essexville, Fairfield, Farmington, Fruit Ridge, Gladstone, Jasper, Lake Linden, Litchfield, Lowell, Manistique, Menominee, Mt. Clemens, Muskegon, Northville, Opechee, Port Huron, Rapid City, Saginaw, W. S., Saginaw, E. S., West Bay City, Weston, Wolverine Mine, Wyandotte.

DAIRY INSPECTIONS.

Report of daries inspected during the month of April.

At Alto:

- C. O'Harra—Number of cows, 12; condition, good; feed, hay, stover, bran, ground corn and oats; stables, new and good, good ventilation; yard, dry and clean; water, well.
- A. Buehler—Number of cows, 15; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

John Richardson—Number of cows, 12; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

R. Murphy—Number of cows, 9; condition, good; feed, hay, corn fodder, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

Fred Lawyer—Number of cows, 10; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

A. Clark—Number of cows, 14; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

- E. E. Keels—Number of cows, 7; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- D. & H. Ferney—Number of cows, 12; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- J. Lawyer—Number of cows, 20; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

At Hopkins:

- C. Knoblock—Number of cows, 19; condition, good; feed, hay, stover, ground corn and oats and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- A. W. Brockway—Number of cows, 9; condition, good; feed, hay, cornstalks, feeds no grain; stables, fair; yard, fair; water, river.
- F. Germain—Number of cows, 7; condition, good; feed, hay, stover. ground corn and oats; stables, fair and fairly clean, fair ventilation. yard, dry and fairly clean; water, well.
- J. E. Ellinger—Number of cows, 8; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well.
- C. B. Heppmaster—Number of cows, 9; condition, good; feed, hay corn fodder, ground corn and oats; stables, fair, poor ventilation; yard. full of manure; water, well.
- C. Heppmaster—Number of cows, 7; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, fairly dry and clean; water, well.
- C. E. Bates—Number of cows, 10; condition, good and clean; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well and spring.
- E. S. Naffer—Number of cows. 19; condition, good and clean; feed. hay, ground corn and oats; stables, good and clean, good ventilation: yard, dry and clean; water, spring.
- J. Shaffer—Number of cows, 14; condition good and clean; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- F. J. Knuth—Number of cows, 22; condition, good and clean; feed, hay, stover, millet, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

- W. H. Weiss—Number of cows, 7; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well.
- Chas. Lane—Number of cows, 24; condition, good and clean; feed, hay, ensilage, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- C. Overacker—Number of cows, 14; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- S. Carver—Number of cows, 12; condition, good; feed, hay, ensilage, ground corn and oats; stables, good and clean, good ventilation; yard, dry and fairly clean; water, well.
- Wm. Iliff—Number of cows, 10; condition, good; feed, hay, corn fodder, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well.
- A. Knute—Number of cows, 9; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well.
- A. B. Calkins—Number of cows, 15; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- J. Thorn—Number of cows, 12; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- H. Smith—Number of cows, 12; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.
- G. W. Baldwin—Number of cows, 15; condition, good and clean; feed, hay, stover, bran, ground corn and oats; stables, good and clean; water, spring.

At Dorr:

- B. C. Warren—Number of cows, 14; condition, good; feed, hay, stover, corn-meal and bran; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, spring.
- A. Belka—Number of cows, 11; condition, good and clean; feed, hay, stover, corn-meal, bran and roots; stables, good and clean, good ventilation; yard, dry and fairly clean; water, well.
- M. Lodkowski—Number of cows, 9; condition, fair; feed, hay and cornstalks; stables, fair and fairly clean, poor ventilation; yard, fair; water, well.

- A. Patterson—Number of cows, 13; condition, good and clean; feed, hay, ensilage, bran and cottonseed meal; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- C. Kamyshek—Number of cows, 9; condition, poor; feed, corn-stalks, no grain; stables, poor; yard, bad; water, creek.
- John Ciacinch—Number of cows, 8; condition, fair; feed, corn fodder, no grain; stables, fair; yard, fair; ventilation, fair; water, well.
 - M. Fraukowski—Number of cows, 8; condition, fair; feed, hay and corn-stalks; stables, fair; yard, fair, ventilation, fair; water, creek.
 - B. Sturgis—Number of cows, 7; condition, fair and fairly clean; feed, hay, stover, ground corn and oats; stables, fair, fair ventilation; yard, dry and fairly clean; water, well.
 - S. Felton—Number of cows, 14; condition, good and clean; feed, hay, stover, corn-meal and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.
 - M. F. Gray—Number of cows, 11; condition, good and clean; feed, hay, stover, corn-meal and bran; stables, good and clean, good ventilation; yard, fair; water, well.

Henry Stein—Number of cows, 7; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, fair; water, well and spring.

Frear Snider—Number of cows, 8; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and fairly clean; water, well.

George Murphy—Number of cows, 10; condition, good; feed, hay, bran, ground corn and oats; stables, good and clean, good ventilation, yard, dry and clean; water, well.

- M. Harig—Number of cows, 8; condition, good; feed, hay and cornmeal; stables, good and clean, good ventilation; yard, dry and fairly clean; water, well.
- E. A. Doherty—Number of cows, 13; condition, good and clean; feed, hay, stover, bran, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- A. U. Cahill—Number of cows, 10; condition, good; feed, hay, stover, bran and corn-meal; stables, good and clean, good ventilation; yard, dry and clean; water, well.

At Fairfield:

C. E. Baker—Number of cows, 10; condition, extra good and clean; feed, hay, stover, corn-meal and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.

J. Valentine—Number of cows, 9; condition, good; feed, hay, stover, ground corn, oats and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.

At Fruit Ridge:

Wm. Anderson—Number of cows, 13; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and fairly clean; water, well.

Williams Bros.—Number of cows, 15; condition, good; feed, hay, ground oats and corn; stables, good and clean, good ventilation; yard, dry and fairly clean; water, well.

- E. Brown—Number of cows, 10; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and fairly clean; water, well.
- J. Camp—Number of cows, 16; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well and spring.
- Smith & Freasles—Number of cows, 8; condition, good; feed, hay, ground corn and oats; stables, good and fairly clean, fair ventilation; yard, dry and fairly clean; water, well.
- A. R. Brown—Number of cows, 10; condition, good; feed, hay, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- Packard & Powell—Number of cows, 15; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well and spring.
- L. P. Russell—Number of cows, 30; condition, good; feed, hay, stover, ground corn, oats and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well and spring.
- Geo. B. Horton—Number of cows, 103; condition, good and clean; feed, hay, stover, ground corn, oats and bran; stables, extra good and clean, good ventilation; yard, dry and clean; water, well and spring.

At Jasper:

- A. G. Baker—Number of cows, 22; condition, extra good and clean; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- E. T. Cole—Number of cows, 13; condition, good; feed, hay, bran, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.
- D. C. Tumson—Number of cows, 15; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.



- G. Liveson—Number of cows, 19; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.
- A. Aldridge—Number of cows, 16; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.

Mrs. Kate Shumway—Number of cows, 15; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.

George Cole—Number of cows, 18; condition, good; feed, hay, stover, ground corn, oats and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.

B. Blom—Number of cows, 12; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.

Henry & Brown—Number of cows, 15; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

At Litchfield:

Barker Bros.—Number of cows, 10; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well and spring.

- E. Baily—Number of cows, 10; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- R. J. Watson—Number of cows, 7; condition, good; feed, hay, stover, ground corn and oats; stables, fair, fair ventilation; yard, dry and fairly clean; water, well.
- C. M. Holkins—Number of cows. 15; condition, extra good and clean; feed, hay, corn-meal and middlings; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- J. M. Vallentine—Number of cows, 18; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well.
- B. Lansday—Number of cows, 10; condition, good; feed, hay, ground corn and oats; stables, good and fairly clean, fair ventilation; yard, dry and clean; water, well.
- R. Washburn—Number of cows, 10; condition, good; feed, hay, stover, ground corn and oats; stables, good and fairly clean, fair ventilation; yard, dry and clean; water, well.

- E. A. Shattuck—Number of cows, 16; condition, rather poor; feed, ν hay, stover, ground corn and oats; stables, fair but dirty, poor ventilation; yard, fair; water, river.
- A. Steinmetz—Number of cows, 14; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.
- T. J. Rasman—Number of cows, 25; condition, good and clean; feed, hay, ensilage, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- A. Conger—Number of cows, 26; condition, good and clean; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and fairly clean; water, well.

Fred Curtis—Number of cows, 7; condition, good; feed, hay, ensilage, middlings, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.

D. W. Hawks—Number of cows, 12; condition, good; feed, hay, ground corn and oats; stables, fair and fairly clean; yard, fair; water, well.

Herrin Bros.—Number of cows, 8; condition, good; feed, hay, stover and corn-meal; stables, good and clean, good ventilation; yard, dry and clean; water, well.

W. Warren—Number of cows, 12; condition, good and clean; feed, hay, ground oats, rye and corn; stables, good and clean, fair ventilation; yard, fair; water, spring.

At Lowell:

Fred Daws—Number of cows, 16; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

Wm. Murphy—Number of cows, 10; condition, good and clean; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

W. B. Graham—Number of cows, 12; condition, good and clean; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

James Estaby—Number of cows, 20; condition, good and clean; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

G. Richner—Number of cows, 12; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

Geo. Bartlett—Number of cows, 7; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.

At Mt. Clemens:

- W. P. Rabso—Number of cows, 21, condition, good; feed, hay, stover, corn-meal and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- T. Simons—Number of cows, 8; condition, fair; feed, hay, stover and corn-meal; stables, fair with poor ventilation; yard, fair; water, well.
- Deneweth Bros.—Number of cows, 29; condition, good and clean; feed, hay, ground corn, oats and bran; stables, fair and clean, fair ventilation; yard, dry and clean; water, river.
- T. Glaesuer—Number of cows; 22; condition, good and clean; feed, hay, stover and corn-meal; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- A. W. Little—Number of cows, 21; condition, good and clean; feed, hay, ensilage, corn and oil meal; stables, good and clean, good ventilation; yard, dry and clean; water, well.

Henry Little—Number of cows, 11; condition, good and clean; feed, hay and corn-meal; stables, good and clean, good ventilation; yard, dry and clean; water, well.

- Little & Barr—Number of cows, 20; condition, good and clean; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, spring.
- F. G. Hecker—Number of cows, 51; condition, good and clean; feed, hay, stover, ground corn, oats and bran; stables, new cement floor, fine ventilation, up-to-date in every particular; yard, dry and clean; water, well.

At Northville:

- H. M. White—Number of cows, 8; condition, good and clean; feed, hay, stover, ground corn and oats; stables, fair; yard, dry; poor ventilation; water, well.
- D. H. DeKay—Number of cows, 10; condition, fair; feed, hay, stover and corn-meal; stables, fair; yard, poor; fair ventilation; water, well.
- H. R. Holmes—Number of cows, 14; condition, good and clean; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, spring.
- E. M. Stockweather—Number of cows, 20; condition, good and clean; feed, hay, stover, silage and bran; stables, extra good and clean, good ventilation; yard, dry and clean; water, spring.
- G. W. Clark—Number of cows, 12; condition, good and clean; feed, hay, stover, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- F. G. Richardson—Number of cows, 26; condition, good and clean; feed, hay, silage, ground corn, oats and bran; stables, good and clean, good ventilation; yard, dry and clean; water, spring.
- J. J. Thompson—Number of cows, 30; condition, good; feed, hay, ground corn and oats; stables, temporary, building new; yard, dry and clean; water, well.
- E. Christancy—Number of cows, 21; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- J. Clark—Number of cows, 14; condition, fair; feed, hay, stover, ground corn and oats; stables, fair and fairly clean, poor ventilation; yard, fair; water, well.

At Port Huron:

Green Bros.—Number of cows, 17; condition, fair; feed, hay and peameal; stables, fair and fairly clean, poor ventilation; yard, fair; water, spring.

- C. Simpson—Number of cows, 18; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well.
- F. F. Wyman—Number of cows, 19; condition, good; feed, hay and peameal; stables, good and clean, fair ventilation; yard, dry and clean; water, spring.
- G. S. Wyman—Number of cows, 13; condition, good; feed, hay and peameal; stables, good and clean, fair ventilation; yard, dry and clean; water, well.
- H. Ellenthorp—Number of cows, 22; condition, good; feed, hay, ensilage and pea-meal; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- G. McCallum—Number of cows, 11; condition, good; feed, hay, cornmeal and pea-meal; stables, rebuilding; yard, dry and clean; water, well and spring.

Slingerland Bros.—Number of cows, 18; condition, good; feed, hay, pea-meal and oil-meal; stables, good and clean, fair ventilation; yard, fair; water, well.

- J. E. Smart—Number of cows, 29; condition, good and clean; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well and river.
- W. Page—Number of cows, 10; condition, poor; feed, hav, ground corn and oats; stables, fair, fair ventilation; yard, fair; water, well.
- G. Wansless—Number of cows, 7; condition, good; feed, hay and peameal; stables, good and clean, good ventilation; yard, dry and clean; water, city.

Digitized by Google

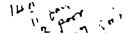
- H. E. Macklin—Number of cows, 9; condition, good; feed, hay and peameal; stables, fair and clean, fair ventilation; yard, dry and clean; water, well.
- P. Marks—Number of cows, 21; condition, fair; feed, hay and peabran; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- S. S. Graham—Number of cows, 27; condition, good; feed, hay, peameal and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- W. Howard—Number of cows, 24; condition, good; feed, hay, peabran, ground corn and oats; stables, good and clean, good ventilation; yard, fair; water, city.
- A. A. Morden—Number of cows, 7; condition, good and clean; feed, hay, ground corn and oats; stables, fair, fair ventilation; yard, dry and clean; water, well.
- G. Keltz—Number of cows, 13; condition, good; feed, hay, pea-bran, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- A. Wight—Number of cows. 23; condition, good; feed, hay, stover and pea-bran; stables, fair, good ventilation; yard, dry and clean; water, well and city.
- G. Fair—Number of cows, 40; condition, fair and fairly clean; feed, hay, stover, ground corn and oats; stables, poor and dirty; yard, bad; water, well.
- O. Annis—Number of cows, 15; condition, good and clean; feed, hay, ground corn and oats and pea-bran; stables, fair, fair ventilation; yard, dry and clean; water, well.
- J. Burnam—Number of cows, 11; condition, fair; feed, hay, corn-meal and bran; stables, fairly clean, poor ventilation; yard, dry and clean; water, city.
- Wm. Routley—Number of cows, 21; condition, good and clean; feed, hay and pea-meal; stables, good and clean, good ventilation; yard, dry and clean; water, spring.
- F. G. Bean—Number of cows. 19; condition, good and clean; feed, hay, ensilage, corn-meal and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.

Geo. Simpson—Number of cows, 18; condition, good; feed, hay and peameal; stables, good and clean, good ventilation; yard, dry and clean; water, well.

D. Smith—Number of cows, 12; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

At Weston:

- L. Peck—Number of cows, 14; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well and spring.
- J. Vim—Number of cows, 9; condition, good; feed, hay, ground corn and oats; stables, fair and clean, fair ventilation; yard, dry and fairly clean; water, well.
- G. Wade—Number of cows, 15; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- C. Kain—Number of cows, 8; condition, good; feed, hay, ground corn and oats; stables, good and fairly clean, good ventilation; yard, dry and clean; water, well.
- A. H. Hall—Number of cows, 10; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and fairly clean; water, well.
- W. Day—Number of cows, 10; condition, good; feed, hay, stover, ground corn and oats; stables, fair and fairly clean, fair ventilation; yard, dry and fairly clean; water, well.
- L. Fritts—Number of cows, 19; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, good ventilation; yard, dry and fairly clean; water, well.
- J. E. Mason—Number of cows, 8; condition, good; feed, hay, corn fodder, ground corn and oats; stables, fair and fairly clean, fair ventilation; yard, fair; water, well.
- Geo. Allen—Number of cows, 10; condition, good; feed, hay, stover, ground corn and oats; stables, good and fairly clean, good ventilation; yard, dry and fairly clean; water, well.
- P. Force—Number of cows, 11; condition, good; feed, hay, stover, bran and middlings; stables, fair and fairly clean, fair ventilation; yard, fair; water, well.
- A. G. Smith—Number of cows, 10; condition, fair; feed, hay and bran; stables, fair, fair ventilation; yard, fair; water, well and creek.
- M. Waldron—Number of cows, 11; condition, good; feed, hay, ground corn and oats; stables, fair and fairly clean, fair ventilation; yard, dry and clean; water, well.
- F. A. DeLano—Number of cows, 21; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.



ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

- 1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;
- 2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;
- 3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;
- 4. If it is in imitation of, or is sold under the name of another article;
- 5. If it consist wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poison-

ous or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;

2. They must contain nothing injurious to health;

3. They must not be sold in imitation of, or under the name of another article:

4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture

or compound:

5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

BAKING POWDER.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter.

CANDY.—Must not contain terra alba, barytes, tale, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

CATSUP.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream

Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee, whether put up for immediate delivery or for stock purposes.

COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing the same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATE AND COCOA.—If containing no other substances than cocoa mass, sugar and flavoring, will not be classed as a compound or mixture.

CANNED GOODS.—Must bear name and address of the packer. If dried before canning must be labeled "Soaked or Bleached Goods," in letters not less than two line pica in size. The sale of peas or other vegetables greened with copper is prohibited.

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper, and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FARINACEOUS GOODS.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound, under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

HONEY.—Must be pure. Cannot be mixed with glucose or other substances and sold as "Honey Compound."

JELLY.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

LARD.—Imitation lard in manufacturers' packages must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and

every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

LIQUOR.—Spirituous, fermented or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.

MAPLE SUGAR AND MAPLE STRUP.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

Milk.—Must contain not less than 3 per cent of fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives in milk is prohibited.

MOLASSES.—Must be branded with its true and appropriate name and must be true to same. (See Syrup.)

OLEOMARGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter, or calculated to be used as or for butter, must be known and designed as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words, "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANCAKE FLOUR.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

Pepper.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and

shall contain not more than ten per cent nor less than six and one-half per cent of nonvolatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard," and bear the name and address of the manufacturer, but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard," and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed

in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them plain and prominent.

SYRUP.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose, shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture," and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package to be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

LANSING MICHIGAN
ROBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS
1902

Digitized by Google

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

w. B. snow, -	-		-	-		- Commissioner
PERLEY C. HEALD,	-	-	. .	-	-	DEPUTY COMMISSIONER
R. E. DOOLITTLE.	_	_	_	_	_	- STATE ANALVOT

NEW LAWS.

Revision of Food Laws.—No bulletin was issued for the month of May that the funds might be available for the publication of a revision of the food laws and the supreme court opinions relating thereto. These are now ready for distribution and will be mailed free of charge upon application to the Dairy and Food Commissioner.

Registration of Cheese Factories and Creameries.—Because of the registration of several cheese factories and creameries since the publication of the April bulletin, we again publish in this issue a complete list of all cheese factories and creameries registered with the Department

for the year ending April 1, 1903.

Supreme Court Decisions During the Month.—In this bulletin will be found two supreme court decisions handed down during the month of June which will be of particular interest to all dealers in food products. In case of People vs. John W. Morse the court reaffirmed its decision in the Skillman case (published in the March bulletin) that an agent taking orders for pure goods cannot be held responsible if his house fills such orders with adulterated products. These decisions render it necessary that the responsibility for the possession of adulterated goods be placed with the dealer where found.

In the case of the People of the State of Michigan vs. George W. Rotter, the Michigan Supreme Court in an opinion handed down on the 25th of this month hold that the so called anti-color oleomargarine law passed at the last session of the Legislature is constitutional. This law prohibits the manufacture, sale, offering or exposing for sale, or having in possession with intent to sell any oleomargarine which shall be in imitation of yellow butter. The opinion in full will be found below and it is urged that all interested in the manufacture or sale of this commodity will carefully study the same that they may have a better understanding of the law as laid down in this decision.

SUPREME COURT.

The People vs. John W. Morse, Defendant and Appellant.

The brief filed on behalf of the people, states that the case is similar to that of The People vs. Skillman, 8 Detroit Legal News 1090, and in

effect concedes that the case must be reversed if we adhere to our former decision.

The defendant took an order for some pepper, as and for pure pepper, to be shipped to a dealer in Muskegon, by defendant's principal, a whole-

saler in Chicago. The pepper when sent was not pure.

It is insisted that the Skillman case is at variance with the weight of authority elsewhere, and contrary to our own cases, in which it is said that we have held that a guilty intent on the part of a vendor, is not essential to an offense, under the pure food law. It is further said that in the decision in the Skillman case, section seventeen of the act must have been overlooked or considered unconstitutional.

The transaction in which the order was taken, did not involve an immediate delivery of pepper, then and there present. It is not shown that the sample, if there was one, was the same as the pepper subsequently sent, or that it was in the least impure. If it be conceded that the agent acted in good faith, and we understand that it is not questioned, he took an order for pure goods, and in doing that certainly committed It is now urged that the exigencies of the enforcement of no offense. this law are such, that we should hold that this innocent and lawful action, may be made a crime by the subsequent act of the principal, either intentional or inadvertent, in departing from, instead of performing the contract which his agent had innocently made. We think this is not so, and we are also of the opinion that this does not necessarily do violence to section seventeen. This transaction, as an entirety, may have been a sale of impure pepper under the statute as to the principal, and not as to the agent. If the order had been taken, with knowledge on the part of the agent of a practice to send impure pepper on such orders, a different question would be presented.

. The judgment is reversed, and a new trial ordered. Long J., did not sit.

FRANK A. HOOKER, R. M. MONTGOMERY, C. B. GRANT, J. B. MOORE.

SUPREME COURT.

The People of the State of Michigan vs. George W. Rotter, Respondent.

Hooker, C. J., filed June 24, 1902.

At its last session, the Legislature passed an act under the title, "An act to prevent deception in the manufacture and sale of imitation butter."

Sec. 1 of said act provides that:

"No person, by himself or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound made wholly or in part out of any fat, oil or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same: Provided, That nothing in this

act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter."

Sec. 2 prescribes a penalty for the violation of the act.

The defendant was a grocer in Emmet County, and is shown to have sold a package of oleomargarine, which by an analysis was proven to have contained artificial coloring matter, and that said oleomargarine was not made wholly from unadulterated milk or cream from the same, and that it was made in imitation of yellow butter, produced from unadulterated milk or cream from the same. The court was asked to direct a verdict of not guilty upon the grounds:

First, That the object of the act was not expressed in the title, as required by Section 20 of Article 4 of the Constitution of this State.

Second, That the act violates the fourteenth amendment, and Section 32 of the Constitution of the United States.

Third, That is was not within the police power of the State.

The evidence conclusively shows that no deception was used in selling the oleomargarine, and there is nothing to indicate that there was any harmful ingredient therein, but that, on the contrary there was not such ingredient. The defendant was convicted, and the case is here on exceptions before sentence.

It is contended that the title to the act indicates that the act was designed to prevent deception in the manufacture and sale of imitation butter, while the act attempts to go further and prevent all sales of such

colored oleomargarine.

If oleomargarine colored yellow, closely resembles yellow butter, made from milk or cream, it can not reasonably be said not to resemble or imitate yellow butter. Butter is a well known commodity. From time immemorial it has had one origin, viz.: from the churning of milk or cream. Whatever may be said of the possibility of making a product from other compounds than milk or cream, that shall closely resemble or be chemically identical with butter, the world has but one understanding of what is meant by the word butter, and we must assume that such is the sense in which our Legislature used the term. Compiled Laws, Sec. 50, Sub. 2.

A fair inference from this statute is that the Legislature undertook to prevent deception, by preventing the sale of any yellow oleomargarine, and it undertook to accomplish this by the most effective means, viz.: by prohibiting the coloring of oleomargarine yellow, thereby avoiding the embarrassment which would otherwise arise from the necessity of proving in each case, that deceit was used in selling it, as and for butter. We think this is fairly within the title, whatever must be said of the other points raised. We are referred to the case of N. W. Mfg. Co. vs. Chambers, 58 Mich. 381, as conclusive upon this question, in which case it is said that "all that could be done under such a title would be to prohibit and prevent sale of such articles under false pretences." We are of the opinion that this language is too restrictive, and that it is at variance with the settled doctrine in this State, that any provision, naturally calculated to accomplish the object expressed in the title may be included in the act.

See Soukup vs. Van Dyke, 109 Mich. 681. People vs. Worden Grocery Co., 118 Mich. 607.

The case cited was rightly disposed of upon another ground, and it is possible that the language above quoted, should be considered a dictum. Moreover the cases are distinguishable for whereas, that act attempted to prevent all sales of imitation butter, and was therefore perhaps inconsistent with the title, which apparently contemplated lawful sales, the statute under consideration in the present case, does not prohibit sales of oleomargarine, which is not tainted with the prohibited ingredients.

It is unnecessary to discuss the other points at length, for the reason that the uniform trend of judicial opinion is that such laws are valid.

State vs. Meyers, 42 W. Va. 825, 35 L. R. A. 844.

New Hampshire vs. Marshall, 1 L. R. A. 51.

Powell vs. Penna., 127 U. S. 678.

People vs. Armsberg, 105 N. Y. 113.

Butler vs. Chambers, 36 Minn. 69.

People vs. Worden Grocery Co., 118 Mich. 604.

People vs. Armsberg, 105 N. Y. 123.

State vs. Crescent Creamery Co., 86 N. W. 107.

State vs. Ball, 46 Atl. Rep. 50.

Wright vs. State, 41 Atl. Rep. 795.

Commonwealth vs. Van Dyke, 13 Pa. Sup. Ct. Rep. 484.

Commonwealth vs. McCann, 14 Pa. Sup. Ct. Rep. 221.

Armour Packing Co. vs. Snyder, 84 Fed. Rep. 136.

Cap. City Dairy Co. vs. State, 22 Sup. Ct. Rep. 120.

We are of the opinion that the Legislature had the power to pass this law, and its wisdom or policy is not for our consideration.

The judgment is affirmed and the court directed to sentence the defendant. Long, J., did not sit. The other justices concurred.

CHEESE FACTORY AND CREAMERY REGISTRATION.

(Extracts from Act No. 193, Public Acts, 1895.) (As amended by Act No. 118, Public Acts, 1897.)

(C. L., 5015.) SEC. 6. Every manufacturer of full milk cheese may put a brand upon each cheese, indicating "Full milk cheese," and no person shall use such a brand upon any cheese made from milk from which any of the cream has been taken. It shall be the duty of the proprietor of every cheese factory, creamery or butter factory in the State where milk or cream is purchased of or contributed by three or more persons, to register the location of such cheese factory, creamery or butter factory and the name of its owner or manager with the Dairy and Food Commissioner on or before the first day of October, A. D. eighteen hundred ninety-seven, and on or before the first day of April in each year there-Whoever violates any of the provisions of this section, in so far as it relates to registration, shall be deemed guilty of a misdemeanor, and for each and every offense shall be punished by a fine of not less than five dollars nor more than twenty-five dollars and the costs of prosecution, or by imprisonment in the county jail for not more than thirty days or both.

(C. L., 5016.) Sec. 7. The Dairy and Food Commissioner shall procure and issue to the cheese manufacturers of the State, on proper application, which application shall be made on or before the first day of October, A. D. eighteen hundred ninety-five, and on or before the first day of April in each year thereafter, and under such regulation as to the custody and use thereof as he may prescribe, a uniform stencil brand, bearing a suitable device or motto, and the words "Michigan full cream cheese." Every such brand shall be used on the outside of the cheese, and upon the package containing the same, and shall bear a separate number for each separate factory. The said commissioner shall keep a book in which shall be registered the name, location and number of each manufactory using the brand, and the name or names of persons at each factory authorized to use the same. No such brand shall be used on other than full cream cheese or packages containing the same. sioner shall receive a fee of one dollar for each registration, said fee to be paid by the party applying for the same, which amount shall be accounted for and used as a part of the fund appropriated for the enforcement of the laws of this State with which the Dairy and Food Commissioner is charged.

(C. L., 5017.) Sec. 8. No person shall knowingly offer, sell or expose for sale, in any package, cheese which is falsely branded or labeled.

CHEESE REGISTRATION.

[Registered with privilege to use the "Michigan Full Cream Cheese" brand from April 1, 1902, to April 1, 1903.]

ALLEGAN COUNTY.

Bran No. 22.	Name of factory.	Location and Postoffice address.	Owner and manager.		
22. 23. 3.	Moline Cheese Factory, Spring Hill Cheese Factory, Springdale Cheese Factory,	Moline, Hopkins Station, Hopkins Station,	E. N. Bates. Miller & Leggett. M. W. Hicks.		
	1	BAY COUNTY.			
65. · 29. 2. 27.	Monitor No. 65, Berger's Brick Cheese Fac., Arn Cheese Factory, Nuffer Bros. Cheese Fac.,	Monitor, Auburn, R. 1, Amelith, W. Bay City, R. 2, Arn Station, Auburn,	Lounsberry & Voss. John Berger. T. E. Webster. Nuffer Bros.		
	C	ASS COUNTY.			
32.	Silver Creek Factory,	Cushing,	Silver Creek D'y Co.		
	CLI	INTON COUNTY.			
24.	Eagle Cheese Factory,	Eagle,	J. H. Fish.		
	· GE	NESEE COUNTY.			
14.	State Road Cheese Factory,	Vienna, Clio,	O. M. Field.		
	HILI	SDALE COUNTY.			
62. 17. 82. 69.	Camden Cheese Factory, Bennett Cheese Factory, Blackmar Cheese Factory, Pittsford Cheese Co. Ltd.,	Camden, Wheatland, Hudson, Blackmar, Pittsford,	O. D. Chester, O. F. Foster. S. A. Sutherland. F. R. Kedzie.		
HURON COUNTY.					
33.	Port Hope Cheese Factory,	Port Hope,	S. T. Jones.		
	К	ENT COUNTY.			
84.	Caledonia Cheese Mfg. Co.,	Caledonia,	N. Clark.		



LAPEER COUNTY.

	LA	PEER COUNTY.				
Bras No. 34.		Location and Postoffice address. Elba,	Owner and manager. Wirt Winship.			
	LEN	IAWEE COUNTY.				
11. 86. 77. 30. 10.	Medina Cheese Factory, Clayton Cheese Factory, Rollin Cheese Factory, Hudson Cheese Factory, Riverside Cheese Factory,	Medina, Clayton, Rollin, Hudson, Riverside, Adrian,	C. C. Colvin & Co. C. C. Colvin & Co. B. L. Peebles. D. W. Rhead & Co. E. L. Baker.			
	MII	DLAND COUNTY.				
44.	Midland Cheese Factory,	Норе,	Wm. C. Schearer.			
	МО	NROE COUNTY.				
60. 67. 59. 78.	Milan Cheese Factory, LaSalle Cheese Factory, Dundee Cheese Factory, Euclid Cheese Factory,	Milan, La Salle, Monroe, Dundee, Petersburg,	John Wise. Chas. E. Kirby. Smith & Dixon. Oliver T. Rose, Sec.			
	Mon	TCALM COUNTY.				
45. 5.	Butternut Cheese Factory, Sheridan Cheese Factory,	Butternut, Sheridan,	J. M. Fitzpatrick. C. H. Clement.			
	OTTA	AWA COUNTY.	•			
7.	Zeeland Cheese Factory,	Zeeland,	S. Bouwers.			
	SAC	GINAW COUNTY.				
37. 47. 21. 13. 8.	Union Cheese Mfg. Co., Chapin Cheese Factory, Buena Vista Cheese Co., Frankentrost Cheese Co., Flint River Cheese, Butter	Frankenmuth, Saginaw, R.4, Chapin, Buena Vista, Saginaw, R. 2, Blumfield, Saginaw, R. 2,	Geo. C. Peters. John Leidlein.			
0.	& Mercantile Co.,	Fosters,	J. C. Malone.			
SHIAWASSEE COUNTY.						
28.	Laingsburgh Cheese Co.,	Laingsburgh,	Stony & Bennett.			
	TUS	SCOLA COUNTY.				
68. 1.	Tuscola Cheese Factory, Arbela Cheese Co.,	Tuscola, Arbela, Clio,	G. W. Dimond. J. A. Picket.			

VAN BUREN COUNTY.

16. Base Line Cheese Factory, Bloomingdale, Lynn Reid.

WAYNE COUNTY.

Brand
No. Name of factory.

Location and Postoffice address.

Owner and manager.
Waltz & Zeigler.

50. Waltz Cheese Factory,

Waltz,

wanz & Zeigier.

WASHTENAW COUNTY.

56. Excelsior Cheese Factory,

Willis, box 62,

Harvey S. Day.

Postoffice Address.

OTHER CHEESE FACTORIES REGISTERED APRIL 1, 1902.

Location, County.

Name. Louis Hildebrand, Mrs. Ida A. Mankin, Michigan Mig. & Mct'l Co., Johnson & Love, T. T. Goodfellow. Leroy T. Smith, Silas Davis, Jr., Eugene Jenkins, C. G. Switzer, Philips & Chapin, D. A. Jenkins, Baker & Sortar, Fitzpatrick & Guild. J. M. Beddow, A. D. Power & Son, Fred M. Warner, Fred M. Warner, Fred M. Warner, Fred M. Warner, Geo. N. Fisher, L. Hubinger, E. G. Fox & Son, Chas. Reitz, E. A. Haven. Fred M. Warner, Fred M. Warner,

Allegan, Allegan, Arenac, Clinton, Genesee. Hillsdale. Jackson, Lenawee, Livingston, Mecosta. Monroe, Monroe, Montcalm, Oakland. Oakland, Oakland, Oakland, Oakland, Oakland. Saginaw, Saginaw, Tuscola, Tuscola, Van Buren, Wayne. Wayne,

North Dorr. Hopkins. Standish. Shepardsville. Grand Blanc. Addison. Liberty. Rome Center. Hamberg. Remus. Grape. Strasberg. Carson City. Beddow. Northville. Farmington. Farmington. Farmington. Farmington. Birch Run. Frankenmuth. Mayville. Mayville. Bloomingdale. Farmington. Farmington.

CREAMERIES REGISTERED APRIL 1, 1902.

ALLEGAN COUNTY.

Name.
Bradley Creamery Co.,
Dorr Creamery Co.,
Martin Creamery Co.,
Monterey Creamery,
The Hilliards Creamery Co.,

Location.
Bradley,
Dorr,
Martin,
Monterey,
Hilliards,

Owner or manager. S. S. Fox. E. S. Botsford. A. C. Monteith. H. H. Stroud. H. E. Parmelee.

 $\mathsf{Digitized}\,\mathsf{by}\,Google$

BARRY COUNTY.

Name. Freeport Creamery Co., Nashville Creamery Co., Woodland Creamery Co., Location.
Freeport,
Nashville,
Woodland,

Owner or manager.
Freeport Creamery Co.
C. W. Smith.
B. S. Holly.

BERRIEN COUNTY.

Galien Creamery Co., Ltd., Pipestone Jersey Creamery, Three Oaks Creamery Co., Galien, Pipestone, Three Oaks, E. A. Blakeslee. Geo. T. Yetter. H. P. Becker.

CALHOUN COUNTY.

Homer Branch Litchfield Butter Co., Homer,

C. N. Holkins.

CASS COUNTY.

Cassopolis Butter and Cheese Fact., Cassopolis,

Davis Haven.

CLINTON COUNTY.

Westphalia Creamery Co., Leoking Glass Creamery, Maple River Creamery, Westphalia, DeWitt, Ovid, Anthony P. Arens. Luther W. Sibley. A. M. Smith & Co.

EATON COUNTY.

Vermontville Creamery Co.,

Vermontville,

D. H. Brown.

GENESEE COUNTY.

Genesee Butter Factory, Goodrich Creamery, Flint Sanitary Milk Co., Grand Blanc, Goodrich, Flint, L. W. Campbell. W. A. Cook. Bruce J. Macdonald, Sec.

HILLSDALE COUNTY.

Camden Creamery, Litchfield Butter Co., Camden, Litchfield, O. D. Chester. C. N. Holkins.

ISABELLA COUNTY.

Shepherd Creamery Co.,

Shepherd,

C. H. Jones.

JACKSON COUNTY.

Parma Butter Co.,

Parma,

Geo. D. Eggleston.

KAMAMAZOO COUNTY.

Climax Creamery Co., Alamo Valley Creamery Co., Schoolcraft Creamery Co., Highland Creamery Assn., Climax, Alamo, Schoolcraft, Oshtemo, F. L. Willison, Sec. M. F. Bachelder, Sec. C. W. Krum, Sec. James E. Hutchinson.

Digitized by Google

LENAWEE COUNTY.

Name. Hudson Creamery Co., Reed Farm Creamery, Cadmus Creamery, Locust Farm Creamery, Tecumseh Creamery,

Location. Hudson, Cadmus, Cadmus, Adrian, Tecumseh,

Owner or manager. H. E. Loyster, Sec. J. H. Sword. L. McLouth & Son. A. B. Graham. Edward Mott & Co.

MACOMB COUNTY.

Richmond Creamery, New Baltimore Creamery Co., Richmond. New Baltimore, G. M. Grennis. Chris Schlosser, Mgr.

MONROE COUNTY.

Monroe Butter & Cheese Factory,

Monroe, Excelsior Creamery Co., Ida, S. Rockwood Butter & Cheese Co., South Rockwood, Andrew Vivian. W. G. Hoffman. J. W. Harris, Sec.

MONTCALM COUNTY.

Lakeview Creamery,

Lakeview,

C. M. Northrop.

OCEANA COUNTY.

Oceana Creamery,

Montague.

E. M. Fuller, J. H. Con-

OSCEOLA COUNTY.

Cooperative Butter & Cheese Ass'n, Evart,

Wm. Vance.

OTTAWA COUNTY.

Crisp Creamery, Cooperative Creamery, Hudsonville Creamery Ass'n, Allendale Creamery,

Crisp, Coopersville, Hudsonville, Allendale,

W. Nienhuis. F. P. Peck. R. P. Cory. Mrs. E. C. Pierson.

SAGINAW COUNTY.

Gera Creamery,

Gera,

John M. Geyer.

SANILAC COUNTY.

Maple Valley Creamery, Maple Valley,

Brown City, Marlette,

Asa E. Piper. A. E. Piper.

SHIAWASSEE COUNTY.

Vernon Creamery,

Vernon,

P. E. Kirkham.

ST. CLAIR COUNTY.

St. Clair Creamery Co..

St. Clair,

J. F. Ruff, Chas. H. Otter.

TUSCOLA COUNTY.

Name.
Caro Elgin Butter Co.,
Vascar Creamery,
Gagetown Creamery Butter Co.,

Location.
Caro,
Vassar,
Gagetown,

Owner or manager. W. H. Bechtel. Wm. C. McKenzie. J. L. Purdy.

WASHTENAW COUNTY.

Ypsilanti Dairy Ass'n,

Ypsilanti,

H. D. Platt.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., June 30, 1902.

HON. W. B. SNOW, Dairy and Food Commissioner:

Sir—During the months of May and June, 52 samples of food products have been examined, 17 being pure and 35 adulterated.

R. E. DOOLITTLE,

State Analyst.

SUMMARY.

Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Butter. Cayenne Extracts (flavoring)	5 12 12 14 6 22 12 15 12	1 1 3 1 5	3 1 2 12 13
Totals	52	17	35

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

BUTTER.

No. R-145. Sample of "Elgin Quality Improved Creamery Process" butter from P. L. Wirth & Bro., Bay City.

Producer, Illinois Creamery Co., Elgin, Ill.

Sample is process butter not properly labeled.

No. R-148. Sample of "Elgin Quality Improved Creamery Process" butter from Frank Scheffer, Bay City.

Producer, Illinois Creamery Co., Elgin, Ill.

Sample is process butter not properly labeled.

No. R-149. Sample of "Elgin Quality Improved Creamery Process" butter, sold for creamery butter, from Wm. E. Tapert, Bay City.

Producer, Illinois Creamery Co., Elgin, Ill.

Sample is process butter.

No. R-150. Sample of "Elgin Quality Improved Creamery Process" butter from Wm. E. Tapert, Bay City.

Producer, Illinois Creamery Co., Elgin, Ill.

Sample is process butter not properly labeled.

EXTRACTS (Flavoring).

No. S-180. Sample of "Coronet Extract Vanilla" from W. B. Matyn, Detroit. Sold by The Edward Henkel Co., Detroit, Mich. Producer, Quaker Extract Co., Chicogo, Ill.

Vanillin. 0.095 per cent.
Coumarin. 0.095 '' ''
Vanilla resin. Present.
Organic acids, gums, etc. ''

Contains Coumarin.

No. S-181. Sample of "Coronet Extract Vanilla" from Jos. Matyn, Detroit. Sold by The Edward Henkel Co., Detroit, Mich.

Producer, Quaker Extract Co., Chicago, Ill.

 Vanillin
 0.083 per cent.

 Coumarin
 0.077 " "

 Vanilla resin
 Present.

 Organic acids, gums, etc
 "

Contains Coumarin.

No. S-187. Sample of "Dieter's Double Strength Extract of Sold by Wolfenden Co., Detroit, Mich. Producer, J. P. Dieter & Co., Chicago, Ill.	f Vanilla."
Vanillin	0.032 per cent. 0.017 "" Trace. Present.
Contains coumarin.	
No. S-188. Sample of "Triple Extract Vanilla." Sold by Wolfenden & Co., Detroit, Mich. Producer, Atwood & Steele, Chicago, Ill. Vanillin. Coumarin Vanilla resin. Organic acids, gums, etc. Label does not bear name and address of manufacturer.	0.030 per cent. None. Present.
No. S-189. Sample of "Double Concentrated Extract of Va Sold by Dueweke & Rausch, Detroit, Mich. Producer, Thompson & Taylor, Chicago, Ill. Vanillin. Coumarin. Vanilla resin. Organic acids, gums, etc.	0.173 per cent. None. None to trace. Present.
Color	Foreign.
No. S-190. Sample of "Dieter's Double Strength Vanilla." Sold by Dueweke & Rausch, Detroit, Mich. Producer, J. P. Dieter & Co., Chicago, Ill.	
Vanillin Coumarin Vanilla resin. Organic acids, gums, etc Contains coumarin.	0.023 per cent. 0.008 " " Present. Present.
No. S-191. Sample of "Crescent Mills Extract of Vanilla." Sold by Lee & Cady, Detroit, Mich.	0.000
Vanillin	0.073 per cent. None. Present. Present.
No. S-193. Sample of "Electric Extract of Vanilla." Sold by Lee & Cady, Detroit, Mich. Producer, G. H. & J. E. Smith, Detroit, Mich.	
Vanillin Coumarin Vanilla resin Organic matter, gums, etc Label does not bear address of manufacturer.	0.022 per cent. None. Present. Present.

No. S-195. Sample of "G. & B. Flavoring Extract of Vanilla." Sold by Grones & Brehmer, Detroit, Mich. Producer, J. P. Dieter & Co., Chicago, Ill. Vanillin...... 0.057 per cent. 0.057 *** Coumarin Vanilla resin..... Present. Organic acids, gums, etc..... Present. Contains coumarin. JELLY. No. K-311. Sample of "Silver Leaf Fresh Fruit Pure Currant Jelly," from Joseph Anderson, Muskegon. Sold by Geo. Humes & Co., Muskegon, Mich. Ash.... 0.36 Reducing sugar. 14.84 " "
Polarization before inversion. +44.4 degrees. Starch Present.
Color. Artificial. Not a pure current jelly, label does not bear manufacturer's name and address. No. U-40. Sample of "Red Currant Fresh Fruit Jelly," from Siller Bros., Houghton. Sold by Sprague, Warner & Co., Chicago, Ill. Producer, Sprague, Warner & Co., Chicago, Ill. Water.... 32.61 degrees. Ash..... 0.4330.67 " Starch Present. Color...... Artificial. Not a pure current jelly. No. U-41. Sample of "Strawberry Fresh Fruit Jelly" from Seller Bros., Houghton. Sold by Sprague, Warner & Co., Chicago, Ill. Producer, Sprague, Warner & Co., Chicago, Ill. Water...... 30.27 per cent. 0.56 Starch Present.
Color. Artificial. Not a pure strawberry jelly. LARD. No. R-151. Sample of "Pure Kettle Rendered Lard" from E. W. Funnell, Bay City. Producer, E. W. Funnell, Bay City, Mich. Refractive index at 40° C..... 1.4603

Iodine absorbed.....

Digitized by Google

65.01 per cent.

Sample is "Lard compound."

MUSTARD.

No. K-317. Sample of "Flavor of Mustard" from John F. VanAnrooy & Sons, Holland.

Sold by Garritt M. VanTubbergen, Holland, Mich.

Producer, The Buckeye Spice Mill, Cincinnati, Ohio.

Ash	2.39	per	cent.
Starch	53.44	- 66	4.6
Volatile ether extract	1.70	66	4.6
Non-violatile ether extract	1.53	66	66

Microscopical examination shows the sample to consist of cornmeal with a little cayenne.

No. K-319. Sample of mustard from Peter A. Klies, Holland.

Ash	6.47	per	cent.
Mustard		. "	64
Tumeric		4.4	44

Colored with tumeric.

OLEOMARGARINE.

No. S-173. Sample of oleomargarine ("Purity" brand) from W. J. Cannings, Detroit.

Sold by Michigan Produce Co., Detroit, Mich.

Producer, Capitol City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-174. Sample of oleomargarine \(\text{"Calumet" brand} \) from H. A. Connelly, Detroit.

Sold by Michigan Produce Co., Detroit, Mich.

Producer, G. H. Hammond, Hammond, Ind.

Oleomargarine artificially colored.

No. S-175. Sample of oleomargarine ("Special" brand) from D. L. Bale, Detroit. Producer, W. J. Moxley, Chicago, Ill.

Oleomargarine artificially colored.

No. S-176. Sample of oleomargarine from Jas. A. Fish, Detroit.

Sold by Michigan Produce Co., Detroit, Mich.

Producer, Capitol City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-177. Sample of oleomargarine ("Purity" brand) from J. F. Klein, Detroit. Sold by Michigan Produce Co., Detroit, Mich.

Producer, Capitol City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-178. Sample of oleomargarine ("Diamond Jersey" brand) from \mathbf{Gutha} & Michel, Detroit.

Producer, Swift & Co., Chicago, Ill.

Oleomargarine artificially colored.

Digitized by Google

No. S-179. Sample of oleomargarine ("Lincoln" brand) from Gutha & Michel, Detroit.

Producer, Swift & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-182. Sample of oleomargarine ("Purity" brand) from Anthony Borschback, Detroit.

Sold by Michigan Produce Co., Detroit, Mich.

Producer, Capitol City Dairy Co., Columbus, Ohio.

Oleomargarine artificially colored.

No. S-183. Sample of oleomargarine ("Excelsior" brand) from C. N. Gore, Wyandotte.

Producer, Friedman & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-184. Sample of oleomargarine ("Perfection" brand) from C. N. Gore, Wyandotte.

Producer, Friedman & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-185. Sample of oleomargarine ("Perfection" brand) from Saunders & Son, Detroit.

Producer, Friedman & Co., Chicago, Ill.

Oleomargarine artificially colored.

No. S-186. Sample of oleomargarine ("Excelsior" brand) from Saunders & Son, Detroit.

Producer, Friedman & Co., Chicago, Ili.

Oleomargarine artificially colored.

PANTRY LEMON.

No. S-198. Sample of "Dry Concentrated Pantry Lemons." Sold by Mortman & William. Columbus, Ohio. Producer, Baker & Heron, Los Angeles, Cal.

Sample is a mixture or compound.

PEPPER.

No. K-310. Sample of "Reid's Pepper" from W. M. Cappel, Muskegon. Sold by Reid, Henderson & Co., Chicago, Ill. Producer, Reid, Henderson & Co., Chicago, Ill.

Total ash	7.93	per	cent.
Ash insoluble in hydrochloric acid (sand)	2.49	- "	
Starch	28.89	6.6	"
Volatile ether extract	1.86	6.6	66
Non-volatile ether extract	6.91	"	
Crude fibre	17.20	"	66

Does not comply with the standard in ash and crude fibre.

No. K-315. Sample of "Flavor of Black Pepper" from John F. VanAnrooy & Sons, Holland.

Sold by Garritt M. VanTubbergen, Holland, Mich. Producer, The Buckeye Spice Mill, Cincinnati, Ohio.

Total ash	7.60	per	cent.
Ash insoluble in hydrochloric acid (sand)	2.53	• "	64
Starch	37.36	66	6.6
Volatile ether extract			"
Non-volatile ether extract		"	66
Crude fibre		66	66

Consists of a mixture of cayenne, cornmeal, rice, husks, stems, etc.

No. K-316. Sample of "Flavor of White Pepper" from John F. VanAnrooy & Sons, Holland.

Sold by Garritt M. VanTubbergen, Holland, Mich. Producer, The Buckeye Spice Mill, Cincinnati, Ohio.

Total ash	14.98	per	cent.
Insoluble in hydrochloric acid (sand)	3.56	- "	66
Starch	37.36	"	66
Volatile ether extract	0.74	"	66
Non-volatile ether extract	1.78	66	66
Crude fibre	7.65	66	"

Consists of a mixture of cayenne, rice, cornmeal, husks, etc.

INSPECTIONS.

The following places were visited by the Department's inspection force during the months of May and June.

Arcadian Mine, Bay City, Benton Harbor, Birmingham, Brant, Chassell, Clayton, Detroit, Douglas, East Tawas, Hancock, Holland, Holly, Houghton, Miner, Mt. Clemens, New Hudson, Niles, Northville, Oshtemo, Pittsford, Plymouth, Pontiac, Redridge, Rollin, Salem, Sand Hill, Saugatuck, Shepardsville, South Lyon, St. Charles, Tawas City, Texas, Wayne, Wyandotte, Zeeland.

DAIRY INSPECTIONS.

Report of dairies inspected during the months of May and June.

At Oshtemo:

- E. Snow-Number of cows, 12; condition, good; feed, pasture and cornmeal; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- J. H. Haynes—Number of cows, 18; condition, good; feed, pasture and cornmeal; stables, good and clean, good ventilation; yard, dry; water, well.
- S. W. Kendall—Number of cows, 8; condition, good; feed, pasture and cornmeal; stables, good and clean, good ventilation; yard, dry; water, well.
- A. Burgard-Number of cows, 7; condition, good; feed, pasture and cornmeal; stables, good and clean, good ventilation; yard, dry; water, well.
- W. H. Shannon-Number of cows, 12; condition, good; feed, pasture and cornmeal; stables, good and clean, good ventilation; yard, dry; water, well.

A. J. Baker—Number of cows, 10; condition, good and clean; feed, pasture, cornmeal and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.

James Hutchinson—Number of cows, 8; condition, good; feed, pasture and cornmeal; stables, good and clean, good ventilation; yard, dry and clean; water, well.

At Sand Hill:

- Mrs. E. Church—Number of cows, 25; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.
- H. Young—Number of cows, 8; condition, good; feed, hay, ground corn and oats; stables, good and clean; good ventilation; yard, dry; water, well.
- R. Church—Number of cows, 28; condition, good; feed, hay, corn, oats and bran; stables, good and clean, fair ventilation; yard, dry and clean; water, well.
- C. Clutt—Number of cows, 12; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

John VanDyke—Number of cows, 9; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.

O. Milliard—Number of cows, 22; condition, good; feed, hay, corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; water, well.

George Sherman—Number of cows, 8; condition, good; feed, hay, corn and oats; stables, good, and fair ventilation; yard, dry and clean; water, well.

G. Larson—Number of cows, 10; condition, good; feed, hay, ground corn and oats; stables, good, good ventilation; yard, dry and clean; water, well.

Larkins Bros.—Number of cows, 16; condition, good; feed, hay, corn, oats and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.

Duboide and Salley—Number of cows, 16; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.

F. Harmon—Number of cows, 23; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry; water, well.

- H. Boers—Number of cows, 10; condition, good; feed, hay, corn, oats and bran; stables, good and fairly clean, fair ventilation; yard, dry; water, well.
- N. Smith—Number of cows, 30; condition, good; feed, hay, corn, oats and bran; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- E. Wood—Number of cows, 20; condition, good; feed, hay, ground corn and oats; stables, good, good ventilation; yard, dry and clean; water, well.
- W. Stringer—Number of cows, 25; condition, good; feed, hay, corn, oats and bran; stables, good and clean; good ventilation; yard, dry; water, well.

At Shepardsville:

- L. H. Allen—Number of cows, 10; condition, good; feed, pasture and cornmeal; stables, good, good ventilation; yard, fairly dry; water, well.
- R. J. Groes—Number of cows, 12; condition, good; feed, pasture, hay and cornmeal; stables, fairly good, fair ventilation; yard, fairly dry; water, well.
- M. McCreary—Number of cows, 8; condition, good; feed, hay, pasture and cornmeal; stables, fair, fair ventilation; yard, dry; water, well.
- George Hetinger—Number of cows, 5; condition, good; feed, pasture, hay and meal; stables, good, fair ventilation; yard, dry; water, well.
- I. J. Frisbe—Number of cows, 10; condition, good; feed, pasture, hay, and meal; stables, good; fair ventilation; yard, fair; water, well.
- L Boyd—Number of cows, 7; condition, good; feed, pasture, hay and meal; stables, fair, fair ventilation; yard, dry; water, well.
- E. Loomis—Number of cows, 6; condition, good; feed, hay, pasture and meal; stables, fair, fair ventilation; yard, dry; water, well.
- M. Coleman—Number of cows, 6; condition, good; feed, pasture, hay and meal; stables, fair, good ventilation; yard, dry; water, well.
- H. Hipolite—Number of cows, 6; condition good; feed, hay and pasture; stables, fair, fair ventilation; yard, fairly dry; water, well.
- C. E. Way—Number of cows, 7; condition, good; feed, pasture, hay and meal; stables, fair; good ventilation; yard, fairly dry; water, well.
- E. R. Munson—Number of cows, 7; condition, good; feed, pasture, hay and meal; stables, good, fair ventilation; yard, dry; water, well.

William Baker—Number of cows, 15; condition, good; feed, pasture, hay and meal; stables, good, good ventilation; yard, dry; water, well.

Digitized by Google

- R. D. Huggins—Number of cows, 8; condition, good; feed, pasture, hay and meal; stables, good, fair ventilation; yard, dry; water, well.
- G. F. Smith—Number of cows, 8; condition, good; feed, pasture, hay and meal; stables, good and clean, fair ventilation; yard, dry; water, well.

William Gibbs—Number of cows, 10; condition, good; feed, pasture and cornmeal; stables, good and clean; good ventilation; yard, dry; water, well.

- S. B. Gleason—Number of cows, 6; condition, good; feed, pasture, hay and meal; stables, good; fair ventilation; yard, dry; water, well.
- J. Cox—Number of cows, 9; condition, good; feed, pasture, hay and cornmeal; stables, good and clean; good ventilation; yard, dry; water, well.
- J. J. Winfield—Number of cows, 7; condition, good; feed, pasture, hay and corn; stables, good and fairly clean, fair ventilation; yard, dry; water, spring.
- H. Langcor—Number of cows, 8; condition, good; feed, pasture, and cornmeal; stables, good, fair ventilation; yard, dry; water, well.
- E. J. Miner—Number of cows, 12; condition, good; feed, pasture, hay and cornmeal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.

At Texas:

- C. Rea—Number of cows, 6; condition, good; feed, pasture, ground corn and oats; stables, good and clean, good ventilation; yard, dry; water, well.
- A. W. Hovey—Number of cows, 5; condition, good; feed, pasture and cornmeal; stables, good and clean, fair ventilation; yard, dry; water, well.
- J. Steele—Number of cows, 8; condition good; feed, pasture and cornmeal; stables, fairly good, good ventilation; yard, dry; water, well.
- G. Easom—Number of cows, 7; condition, good; feed, pasture, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- W. S. Swan—Number of cows, 8; condition, good; feed, pasture, ground corn and oats; stables, good, fair ventilation; yard, dry and clean; water, well.
- W. Rix—Number of cows, 12; condition, good; feed, pasture and cornmeal; stables, good, fair ventilation; yard, dry and clean; water, well.

W. Howe—Number of cows, 7; condition, good; feed, pasture and cornmeal; stables, good and clean, good ventilation; yard, dry and clean; water, well.

At Wayne:

Ed. Beycer—Number of cows, 8; condition, good; feed, hay, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.

B. Boice—Number of cows, 9; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

George Avery—Number of cows, 9; condition, good; feed, hay, oats and peameal; stables, good and clean, good ventilation; yard, dry and clean; water, well.

- L. Wendt—Number of cows, 7; condition, good; feed, hay, ground corn and oats; stables, good and fairly clean, good ventilation; yard, dry and clean; water, well.
- R. Beeman—Number of cows, 10; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.
- M. Sausler—Number of cows, 10; condition, good; feed, hay, ground corn and oats; stables, good and clean, fair ventilation; yard, dry and clean; water, well.

Henry Carlson—Number of cows, 13; condition, good; feed, hay, ground corn and oats; stables, good and clean, good ventilation; yard, dry and clean; water, well.

APIARY INSPECTIONS.

At Adrian R. R. No. 2:

Morgan Robinson—Number of colonies, 3.

- At Brant—Number of colonies, 16; colonies weak, mostly diseased; yard, fair.
- J. R. Eaton—Number of colonies, 42; colonies, good; flora, clover, linden and fall flowers; yard, neat.

At Clayton, R. R. No. 2:

Marion C. Smith-Number of colonies, 6; colonies, fair.

- J. H. Adams-Number of colonies, 1; colonies, diseased.
- C. W. Harris—Number of colonies, 2; colonies, fair.

At Hudson, R. R. No. 2:

George Friess-Number of colonies, 20; colonies, fair; yard, neglected.

At Miner:

W. A. Hammond-Number of colonies, 6; colonies strong.

Andrew McPhee-Number of colonies, 42; colonies, fine; yard, good.

At New Hudson:

Homer Parker—Number of colonies, 1; colonies, diseased; yard, diseased, combs exposed.

- L. B. Sinclair—Number of colonies, 2; colonies, diseased; yard, neglected, diseased combs exposed.
- H. J. Scott—Number of colonies, 45; colonies, fine; flora, clover, linden and fall flowers; yard, neat and well kept.

At Northville:

Darwin Brackett-Number of colonies, 5; colonies, good; yard, excellent.

- J. C. Buckner-Number of colonies, 5; colonies, good; yard, fair.
- O. B. Moore-Number of colonies, 4; colonies, fair; yard, fair.

George Gibson-Number of colonies, ten; colonies, very bad, all diseased; yard, very bad.

Dell Siver-Number of colonies, 34; colonies, excellent; flora, clover; yard, fair.

At Prattville:

- Mrs. C. W. DeLong—Number of colonies, 3; colonies, diseased; yard, good.
 - R. E. Durling-Number of colonies, 30; colonies, good; yard, fair.

At Rollin:

- A. Townsend-Number of colonies, 2; colonies, fair, 1 diseased.
- O. E. Clark—Number of colonies 1; colonies, fair.
- F. W. Bowman—Number of colonies, 1; colonies diseased; yard, diseased, combs exposed.

Francis Clark-Number of colonies, fixtures; yard, diseased, combs exposed.

G. D. Pibbles—Number of colonies, 5; colonies, diseased; yard, neglected.

At Salem:

Walter Ryden—Number of colonies, 16; colonies, fair; flora, clover; yard, fair.

Mrs. Laura E. Roberts—Number of colonies, 16; colonies, fair; flora, clover; yard, fair.

Mr. Stephens—Number of colonies, 20; colonies, fair; flora, clover; yard, fair.

Frank Ryder—Number of colonies, 10; colonies, fair; honey house, fair; yard, fair.

At South Lyons:

A. H. Bidwell—Number of colonies, 4; colonies, fair; yard, bad, diseased combs exposed.

Chas. Everett-Number of colonies, 13; colonies, fair; yard, fair.

At St. Charles:

Mrs. Jas. McNeil-Number of colonies, 12; colonies, fair.

Jesse Willis—Number of colonies, 36; colonies, weak and diseased; flora, clover and fall flowers; honey house, very much neglected; yard, fair.

Jesse Willis-Number of colonies, 17; colonies, all diseased.

C. C. Cadwell-Number of colonies, 20; colonies, fair; yard, neat.

Thos. Carl-Number of colonies, 3; colonies, fair, one diseased.

Allen Trumble—Number of colonies, 2; colonies, diseased.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Ruling cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;

2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;

3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it:

4. If it is in imitation of, or is sold under the name of another article;

5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article,

whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal:

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poisonous

or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof:

2. They must contain nothing injurious to health:

- 3. They must not be sold in imitation of, or under the name of another article;
- 4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or sompound;
- 5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled, "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter.

CANDY.—Must not contain terra alba, barytes, tale, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

CATSUP.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

CHEERE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATES AND COCOAS.—If containing no other substances than cocoa mass, sugar and flavoring will not be classed as a compound or mixture.

CANNED GOODS.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pics in size. The sale of peas or other vegetables greened with copper is prohibited.

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must be are the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper, and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FARINACEOUS GOODS.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Taploca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

HONEY.—Must be pure. Cannot be mixed with glucose or other substances and sold as "Honey Compound."

JELLY.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

LARD.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquors.—Spirituous, fermented, or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing,

rectifying or preparing same in any way must brand on each barrel, cask, or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.

MAPLE SUGAR AND MAPLE SYEUP.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

MILK.—Must contain not less than 3 per cent fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives to milk is prohibited.

MOLASSES.—Must be branded with its true and appropriate name and must be true to same. (See Syrup.)

OLEOMARGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words, "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANCAKE FLOURS.—If containing more than one article must be sold as a mixture or Compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

PEPPER.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer, but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard," and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words,

"Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed

in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them plain and prominent.

SYRUPS.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture" and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

' LANSING MICHIGAN

BOBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS
1902

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

W. B. SNOW, -	-	-		-	-	_	-	COMMISSIONE
PERLEY C. HEALD,	-	-	-	-		-	DEPUTY	COMMISSIONE
R. E. DOOLITTLE.	_	_	-	-	_	_	- 8	STATE ANALYST

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1902.	
Cases pending July 1, 1902,	38 4
CASES DISPOSED OF.	
Before Examining Magistrates: Defendants bound over to trial courts Defendants discharged on examination	1
In Trial Courts: Defendants convicted Defendants acquitted	2
Cases pending August 1, 1902	40

PROCEEDINGS HAD DURING THE MONTH OF JULY.

Complaint was made July 22, in justice court of the city of Frankfort, against Albert B. Harmon, charged with selling colored oleomargarine. Examination was held July 29 and defendant bound over to the August term of circuit court for the county of Benzie for trial.

Complaint was made July 30, in police court of the city of Detroit, against Francis T. Schmidt, charged with selling colored oleomargarine.

Examination was set for August 8.

Complaint was made July 30, in police court of the city of Detroit, against Peter Smith & Sons, charged with selling colored oleomargarine. Examination was set for August 8.

Complaint was made July 30, in police court of the city of Detroit, against McWilliams & Moore, charged with selling colored oleomarga-

rine. Examination was set for August 8.

In the case pending in the circuit court of the county of Antrim, against W. E. Vaughan of the Antrim Iron Co., of Antrim, charged with selling colored oleomargarine, defendant on July 28 was found guilty and a fine of \$50 was imposed by the court.

In the case pending in the circuit court of the county of Antrim, against Chas. Weiffenbach of Bellaire, charged with selling colored oleomargarine, defendant on July 28 was found guilty and a fine of \$50 was imposed by the court.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., July 31, 1902.

Hon. W. B. Snow, Dairy and Food Commissioner:

Sir—During the month of July, 29 samples of food products have been examined, 11 being pure and 18 adulterated.

R. E. DOOLITTLE,

State Analyst.

SUMMARY.

Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Allspiece Butter Cayenne Connamon Connounds or Mixtures Jelly Lard Mustard Oleomargarine Pepper Vinegar	1 1 1 2 6 3 1 7	2 2 2 1	2 6 1 1 5 2 1
Totals	29	11	18

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

MIXTURES OR COMPOUNDS.

JELLY.

No. L-254. Sample of "Golden Sheaf Strawberry Jelly," from P. W. Nichols, Cadillac.

Sold by The Dow & Snell Co., Toledo, Ohio. Producer, The Dow & Snell Co., Toledo, Ohio.

Water	27.17 per	cent.
Ash	0.78 ***	"
Reducing sugar	22.50 "	"
Polarization before inversion	+102.4 degr	ees.
Polarization after inversion	+83.6	
Starch	Present.	
Color	Artificial.	

Imitation fruit jelly artificially colored.

No. S-199. Sample of "Shrewsbury Transparent Jelly," from W. N. Smith, Detroit.

Producer, E. C. Hazard, New York, N. Y.

Water		22.37	per cent.
Water Ash		0.28	*** **
Reducing sugar		34.47	66 66
Polarization before inversion	+	-44.8	degrees.
Polarization after inversion	. 	- 3.5	٠,,
Gelatine	· · · · · · · · · · ·		

Contains glucose.

No. S-200. Sample of "Heinz's Strawberry Imitation Fruit Jelly," from R. W. Boyd, Adrian.

Sold by R. A. Bartley, Toledo, Ohio. Producer, Heinz & Co., Lafayette, Ind.

WaterAsh	25.03	per	cent.
Ash	0.48	-66	"
Reducing sugar	44.71	"	66
Polarization before inversion	-86.4	degi	ees.
Polarization after inversion	-79.4		i i
Starch			
Color	Artif	icial.	

Imitation fruit jelly artificially colored.

No. S-201. Sample of "Heinz's Grape Imitation Fruit Jelly," from R. W. Boyd, Adrian.

Sold by R. A. Bartley, Toledo, Ohio. Producer, Heinz & Co., Lafayette, Ind.

Water	32.38	per c	ent.
WaterAsh	0.48	-44	"
Reducing sugar	43.23	"	46
Polarization before inversion	∔73.4	degre	es.
Polarization after inversion	69.1	٠,	
Starch	Pres	ent.	
Color	Artif	icial.	

Imitation fruit jelly artificially colored.

No. S-202. Sample of "Heinz's Blackberry Imitation Fruit Jelly," from R. W. Boyd, Adrian.

Sold by R. A. Bartley, Toledo, Ohio. Producer, Heinz & Co., Lafayette, Ind.

Water	24.65	per cent.
Ash	0.46	- "
Reducing sugar	39.46	"
Polarization before inversion	-90.4	degrees.
Polarization after inversion	81.8	6.
Starch	Prese	nt.
Color.	Artif	cial.

Imitation fruit jelly artificially colored.

No. S-203. Sample of "Heinz's Currant Imitation Fruit Jelly," from R. W. Boyd, Adrian.

Sold by R. A. Bartley, Toledo, Ohio.

Producer, Heinz & Co., Lafayette, Ind.

WaterAsh	28.01	per	cent.
Ash	0.53	- "	"
Reducing sugar	35.28	"	"
Polarization before inversion	+79.6	deg	rees.
Polarization after inversion	∔ 78.7	,	6
Starch	Prese	ent.	
Color	Artif	icial	
Imitation fruit jelly artificially colored.			

LARD.

No. S-205. Sample of lard from Hammond, Standish & Co.,	Detroit.
Refractive index 40° C	
Cotton seed oil	Present.
Lard compound.	i icschu.

MUSTARD.

No. 1 K-326.	Sample	of	mustard	from	The	Great	Atlantic	&	Pacific	Co.,	Grand
Rapids.	_										

Ash	3.91 per cent.
Starch	39.75
Mustard	
Turmeric	

Adulterated with wheat starch and turmeric.

OLEOMARGARINE.

No. K-332. Sample of oleomargarine from The Morse Dry Goods Co., Grand Rapids.

Sold by Michigan Produce Co., Detroit, Mich.

Producer, G. H. Hammond Co., Hammond, Ind.

Refractive Index at 25°C	1.4660	
Reichert-Meissl Number	0.69	
Color	<i>l</i> ellow	Azo Dye.

Oleomargarine artificially colored.

No. S-208. Sample of oleomargarine from Francis T. Schmidt, Detroit. Sold by Michigan Produce Co., Detroit, Mich.

Producer, Capitol City Dairy Co., Columbus, Ohio.

Refractive Index at 25° C	1.4642
Reichert-Meissl Number	0.72
Color	Annetto

Oleomargarine artificially colored.

· ·	
No. S-209. Sample of oleomargarine from Peter Smith & Sons, I Producer, G. H. Hammond Co., Hammond, Ind.	Detroit.
Refractive Index at 25° C. Reichert-Meissl Number. Color.	0.67
Oleomargarine artificially colored.	
No. S-211. Sample of oleomargarine from McWilliams & Moore,	Detroit.
Sold by Michigan Produce Co., Detroit, Mich. Producer, Capitol City Dairy Co., Columbus, Ohio.	
Refractive Index at 25° C	0.73
Oleomargarine artificially colored.	
No. S-213. Sample of oleomargarine from Lafer Bros., Detroit	it.
Refractive Index at 25° C	0. 73
Oleomargarine artificially colored.	
PEPPER.	
No. K-324. Sample of black pepper from the Great Atlantic Grand Rapids.	and Pacific Co.,
Producer, Sultana Spice Mill, New York.	
Total ash	6 per cent.
Starch	3 " "
Volatile ether extract. 1.2 Non-volatile ether extract 4.0 Crude fiber. 18.8	6 "
Contains wheat and rice.	
No. K-333. Sample of pepper from Louis Hoelzley, Grand Rapi	ds.
Total ash	0 per cent.
Starch	6 " "
Volatile ether extract	98
Crude fiber	
Consists mostly of pepper shells.	
VINEGAR.	
No. S-204. Sample of cider vinegar from F. C. Miller & Co., Mil	an.
Producer F. C. Miller, Milan, Mich.	.070
Below the standard in solids and in acid strength.	

INSPECTIONS.

The following places were visited by the Department's inspection

force during the month of July:

Adrian, Bishop, Brunswick, Cadillac, Calumet, Champion Mine, Charlevoix, Chassell, Cheboygan, Detroit, Dundee, Fremont, Gaylord, Grand Rapids, Grayling, Hancock, Hesperia, Hopkins Station, Kent City, Laurium, Mendon, Milan, Monroe, Muskegon, Newaygo, Otsego, Petoskey, Pori, Reeman, Sparta, Stoney Creek, Sturgis, Traverse City, Vicksburg, White Pigeon, Wolverine.

DAIRY INSPECTIONS.

Report of dairies inspected during July.

At Bishop:

- L. Hoefman—Number of cows, 6; condition, good; feed, pasture; stables, fair; ventilation, good; yard, fair; water, well.
- T. Bockhouse—Number of cows, 5; condition, good; feed, pasture; stables, fair; fair ventilation; yard, fair; water, well.
- G. Zoerink—Number of cows, 5; condition, good; feed, pasture; stables, good; ventilation, good; yard, dry; water, well.
- J. Trumbley—Number of cows, 5; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair; water, well.
- H. Osterhouse—Number of cows, 6; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair; water, well.

John Dobbin—Number of cows, 12; condition, good; feed, pasture; stables, good; ventilation, good; yard, good; water, well.

At Branswick:

- A. Rasmenson—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; ventilation, good; yard, dry; water, well.
- P. DeMors—Number of cows, 8; condition, good; feed, pasture; stables, good; ventilation, good; yard, good and dry; water, well.

- A. Morrison—Number of cows, 6; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, dry; good drainage; water, well.
- F. Matthews—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; ventilation, good; yard, dry; good drainage; water, well.
- H. Zerlout—Number of cows, 5; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, dry; good drainage; water, well.
- C. Nelson—Number of cows, 8; condition, good; feed, pasture; stables, fairly good; ventilation, good; yard, dry; good drainage; water, well.
- H. Moon—Number of cows, 7; condition, good; feed, pasture; stables, fair; ventilation, good; yard, dry; water, well.

At Fremont:

- A. Vereus—Number of cows, 5; condition, good; feed, pasture; stables, fair; ventilation, good; yard, dry; water, well.
- V. DeVilde—Number of cows, 6; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair; water, well.
- G. VanBelt—Number of cows, 8; condition, good; feed, pasture; stables, good; ventilation, fair; yard, fair; water, spring.
- E. McDonald—Number of cows, 8; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair; water, well.
- B. Hobeke—Number of cows, 6; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair; water, well.
- A. Laukent—Number of cows, 8; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair; water, well.
- R. Layengall—Number of cows, 9; condition, fair; feed, pasture; stables, fair; ventilation, fair; yard, dry; water, spring.
- J. Maat—Number of cows, 8; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair; water, spring.
- C. A. Pierson—Number of cows, 15; condition, good; feed, pasture; stables, good; ventilation, good; yard, dry; water, spring.
- G. Shroven—Number of cows, 8; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, dry; water, spring.
- J. W. Johnson—Number of cows, 15; condition, good; feed, pasture; stables, good; ventilation, good; yard, dry; water, well.
- J. Wentzell—Number of cows, 6; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair; water, well.

At Hesperia:

M. Ressegein—Number of cows, 7; condition, good; feed, pasture; stables, good; ventilation, fair; yard, good; water, well.

- B. Boerma—Number of cows, 5; condition, good; feed, pasture; stables, good; ventilation, good; yard, good; water, well.
- C. Fenny—Number of cows, 5; condition, good; feed, pasture; stables, good and clean; ventilation, good; yard, dry; water, well.
- J. Lewis—Number of cows, 5; condition, good; feed, pasture; stables, fair; ventilation, good; yard, dry; water, well.
- A. Stone—Number of cows, 6; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair; water, well.
- H. Hunt—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; ventilation, fair; yard, dry and clean; water, well.
- M. Donehue—Number of cows, 15; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, dry and clean; water, well.
- W. McCallum—Number of cows, 6; condition, good; feed, pasture; stables, good; ventilation, fair; yard, fair; water, well.
- T. Baker—Number of cows, 7; condition, good; feed, pasture; stables, fairly good; ventilation, fair; yard, dry; fair drainage; water, well.
- L. A. Atwater—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry; fair drainage; water, well.
- C. Button—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- E. Gregory—Number of cows, 8; condition, good; feed, pasture; stables, fairly good; good ventilation; yard, dry; fair drainage; water, well.
- G. Barnum—Number of cows, 6; condition, good; feed, pasture; stables, fairly good; fair ventilation; yard, dry; fair drainage; water, well.
- E. Buskirk—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; yard, dry; fair drainage; water, well and spring.
- Wm. Gregory—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fairly dry; water, well.
- J. L. Rumrey—Number of cows, 11; condition, good; feed, pasture; stables, fairly good; good ventilation; yard, dry; fair drainage; water, well.
- K. O. Baird—Number of cows, 15; condition, good; feed, pasture; stables, good; good ventilation; yard, dry; fair drainage; water, spring.
- J. A. Baird—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; water, spring.

- D. McBride—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; water, well.
- R. H. Baird—Number of cows, 14; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry; water, well and spring.

Wm. Lindsley—Number of cows, 12; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry; water, well.

- C. Braft—Number of cows, 13; condition, good; feed, pasture; stables, good; fair ventilation; yard, dry; fair drainage; water, well.
- H. Wamhaft—Number of cows, 12; condition, good; feed, pasture; stables, good; fair ventilation; yard, dry; fair drainage; water, well.
- C. B. Hoffmaster—Number of cows, 7; condition, good; feed, pasture; stables, good; fair ventilation; yard, dry; fair drainage; water, well and spring.
- J. Thorn—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry; good drainage; water, well and spring.
- C. Knoblack—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; yard, dry; fair drainage; water, well.
- F. Sebright—Number of cows, 11; condition, good; feed, pasture; stables, fairly good; fair ventilation; yard, fair; water, well.
- H. Shaffer—Number of cows, 14; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- G. Knuth—Number of cows, 8; condition, good; feed, pasture; stables, good, with good ventilation; yard, dry; fair drainage; water, well.
- A. Knuth—Number of cows, 9; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry; fair drainage; water, well.

Knuth and Calkins—Number of cows, 20; condition, good; feed, pasture; stables, good; good ventilation; yard, dry; fair drainage; water, well.

- A. Bates—Number of cows, 10; condition, good; feed, pasture; stables, fairly good and clean; good ventilation; yard, dry; fair drainage; water, well.
- D. C. Ingerson—Number of cows, 7; condition, good; feed, pasture; stables, good; good ventilation; yard, dry; good drainage; water, well and spring.
- A. E. King—Number of cows, 6; condition, good; feed, pasture; stables, good; fair ventilation; yard, dry; water, well.

- E. B. Wilcox—Number of cows, 6; condition, good; feed, pasture; stables, good; fair ventilation; yard, dry; water, well.
- D. Hazen—Number of cows, 9; condition, good; feed, pasture; stables, good; fair ventilation; yard, dry; fair drainage; water, well.
- F. Elenger—Number of cows, 7; condition, good; feed, pasture; stables, good; fair ventilation; yard, dry; good drainage; water, well.

Beal Bros.—Number of cows, 7; condition, good; feed, pasture; stables, fairly good; fair ventilation; yard, fairly dry; water, well.

- J. Edmonds—Number of cows, 8; condition, good; feed, pasture; stables, good, ventilation, good; yard, dry; good drainage; water, well.
- G. R. Martin—Number of cows, 8; condition, good; feed, pasture; stables, good; good ventilation; yard, dry; water, well.

At Kent City;

- E. Sprague—Number of cows, 4; condition, good; feed, pasture; stables, good; ventilation, fair; yard, fair; water, well.
- J. Stimpson—Number of cows, 8; condition, good; feed, pasture; stables, fair; fair ventilation; yard, fair; water, well.
- C. Parrish—Number of cows, 12; condition, good; feed, pasture; stables, good; good ventilation; yard, dry; water, well.

George Hemsley—Number of cows, 8; condition, good; feed, pasture; stables, fair; good ventilation; yard, fairly dry; water, well.

- J. A. Anderson—Number of cows, 10; condition, good; feed, pasture; stables, fair; good ventilation; yard, fair; water, well.
- F. Doubleday—Number of cows, 5; condition, fair; feed, pasture; stables, good; ventilation, good; yard, dry; water, well.
- G. K. Playton—Number of cows. 8; condition, good; feed, pasture; stables, good; ventilation, good; yard, fairly dry; water, well.
- C. Church—Number of cows, 9; condition, fair; feed, pasture; stables, good; ventilation, fair; yard, dry; water, well.
- G. O'Connell—Number of cows, 12; condition, fair; feed, pasture; stables, fair; ventilation, good; yard, dry; water, well.
- G. Klink—Number of cows, 11; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair; water, well.
- H. Harodina—Number of cows, 12; condition, good; feed, pasture; stables, good; ventilation, fair; yard, fair; water, well.
- A. L. Power—Number of cows. 16; condition, good; feed, pasture; stables, fairly good; fair ventilation; yard, dry; water, well.

At Mendon:

- A. E. Beebe—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry; water, well.
- W. Conkenard—Number of cows, 9; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry; water, well.
- H. Wagner—Number of cows, S; condition, good; feed, pasture, ground corn and oats; stables, good; good ventilation; yard, dry and clean; water, well.
- J. Wagner—Number of cows, 6; condition, good; feed, pasture and oats; stables, fairly good and clean; fair ventilation; yard, dry; water, well.
- J. W. Simpson—Number of cows, 8; condition, good; feed, pasture and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- W. G. Simpson—Number of cows, 8; condition, good; feed, pasture, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. Morantelli—Number of cows, 6; condition, good; feed, pasture and oats; stables, fairly good; yard, fair; fair ventilation; water, well.
- L. Morantelli—Number of cows, 5; condition, good; feed, pasture and cornmeal; stables, good and clean; good ventilation; yard, dry and fairly clean; water, well.
- S. Hoch—Number of cows, 6; condition, good; feed, pasture, ground corn and oats; stables, good and clean; good ventilation; yard, dry; water, well.
- Wm. Flock—Number of cows, 9; condition, good; feed, pasture and meal; stables, fair; fair ventilation; yard, dry; water, well.
- D. Coon—Number of cows, 6; condition, good; feed, pasture and grain; stables, fairly good; good ventilation; yard, dry; water, well.
- J. Mumby—Number of cows, 8; condition, good; feed, pasture and cornmeal; stables, fair; fair ventilation; yard, dry; water, well.
- E. Miller—Number of cows, 6; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry; water, well.
- F. Huckendubler—Number of cows, 6; condition, good; feed, pasture; stables, fair; fair ventilation; yard, fairly dry; water, well.
- T. Haas—Number of cows, 6; condition, good; feed, pasture; stables, fair and fairly clean; good ventilation; yard, dry; water, well.
- Wm. Hoppel—Number of cows, 6; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry; water, well.
- J. Scott—Number of cows, 6; condition, good; feed, pasture and meal; stables, good; fair ventilation; yard, dry; water, well.

- I. Taylor—Number of cows, 6; condition, good; feed, pasture and oats; stables, good and clean; good ventilation; yard, dry; water, well.
- G. Monton—Number of cows, 8; condition, good; feed, pasture and meal; stables, good, with good ventilation; yard, dry and clean; water, well.
- C. Varheas—Number of cows, 8; condition, good; feed, pasture and meal; stables, good; good ventilation; yard, dry; water, well.

At Musicegon:

- F. Saxe—Number of cows, 5; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, dry; water, well.
- W. Carlson—Number of cows, 9; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, dry and clean; water, well.
- H. Anderson—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; yard, good; ventilation, good; water, well.
- F. Jones—Number of cows, 12; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry; water, well.
- Mrs. M. Peterson—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. Peterson—Number of cows, 30; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry, good drainage; water, well.
- M. Olson—Number of cows, 9; condition, good; feed, pasture; stables, fair; good ventilation; yard, dry; water, well.
- C. Ward—Number of cows, 6; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry; water, well.
- A. Worel—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; water, well.

At Newaygo:

- D. Powers—Number of cows, 4; condition, good; feed, pasture; stables, good; fair ventilation; yard, good; water, spring.
- G. A. Day—Number of cows, 15; condition, good; feed, pasture; stables, good; fair ventilation; yard, fair; water, well.
- H. Milliard—Number of cows, 5; condition, good; feed, pasture; stables, fair; good ventilation; yard, dry; water, well.
- S. Ricket—Number of cows, 7; condition, good; feed, pasture; stables, fair; good ventilation; yard, fair; water, well.
- H. W. Shorer—Number of cows, 8; condition, good; feed, pasture; stables, good; good ventilation; yard, good; water, well.

E. Pierce—Number of cows, 6; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry; water, well.

At Otsego:

- Geo. Dessing—Number of cows, 12; condition, good; feed, pasture, ground corn and oats; stables, good and clean; good ventilation; yard, fairly dry; water, well.
- F. Hugan—Number of cows, 8; condition, good; feed, pasture and cornmeal; stables, good with fair drainage; yard, dry; water, well.
- C. Nevens—Number of cows, 5; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Crane—Number of cows, 5; condition, good; feed, pasture and bran; stables, good, with good ventilation; yard, dry; water, well.
- J. Jesseph—Number of cows, 5; condition, good; feed, pasture and bran; stables, good, with fair ventilation; yard, fairly dry; water, well.
- W. A. Potter—Number of cows, 10; condition, good; feed, hay, ground corn and oats; stables, good; good ventilation; yard, dry and clean; water, well.
- E. Springer—Number of cows, 6; condition, good; feed, pasture and cornmeal; stables, good; good ventilation; yard, dry; water, well.
- D. Bush—Number of cows, 8; condition, good; feed, pasture and cornmeal; stables, good; good ventilation; yard, dry; water, well.
- O. Howe—Number of cows, 10; condition, good; feed, pasture and meal; stables, good; good ventilation; yard, dry, good drainage; water, well.
- O. Crarthers—Number of cows, 6; condition, good; feed, pasture and meal; stables, fairly good; fair ventilation; yard, dry; water, well.

Frank Taws—Number of cows, 6; condition, good; feed, pasture and cornmeal; stables, good, with fair ventilation; yard, dry; water, well.

- O. Stratton—Number of cows, 5; condition, good; feed, pasture, ground corn and oats; stables, good, with good ventilation; yard, dry; water, well.
- A. Longnecker—Number of cows, 7; condition, good; feed, pasture and cornmeal; stables, good; good ventilation; yard, dry; water, well.
- W. Scott—Number of cows, 5; condition, good and clean; feed, pasture and cornmeal; stables, good and clean; good ventilation; yard, dry; water, well.
- S. E. Shears—Number of cows, 16; condition, good; feed, pasture, ground corn and oats; stables, good and clean; good ventilation; yard, dry; water, well.

F. Webster—Number of cows, 6; condition, good; feed, pasture, ground corn and oats; stables, good, with fair drainage; yard, dry and clean; water, well.

At Reeman:

- W. A. Tibbits—Number of cows, 6; condition, good; feed, pasture; stables, good; good ventilation; yard, good; water, well.
- L. Jordan—Number of cows, 7; condition, good; feed, pasture; stables, good; fair ventilation; yard, fair; water, well.
- P. Dore—Number of cows, 6; condition, good; feed, pasture; stables, fair; fair ventilation; yard, fair; water, well.
- J. Brotherton—Number of cows, 6; condition, good; feed, pasture; stables, good; good ventilation; yard, good; water, well.
- J. Trens—Number of cows, 6; condition, good; feed, pasture; stables, good; fair ventilation; yard, fair; water, well.
- G. L. Reed—Númber of cows, 6; condition, good; feed, pasture; stables, good; good ventilation; yard, good; water, well.
- D. Pikaart—Number of cows, 8; condition, good; feed, pasture; stables, fair; fair ventilation; yard, fair; water, well.
- A. Lubars—Number of cows, 8; condition, good; feed, pasture; stables, good; good ventilation; yard, good; water, well.
- C. Boyd—Number of cows, 7; condition, good; feed, pasture; stables, good; fair ventilation; yard, good; water, well.

George Haever—Number of cows, 5; condition, good; feed, pasture; stables, good; good ventilation; yard, good; water, spring.

- J. Pell—Number of cows, 6; condition, fair; feed, pasture; stables, good; good ventilation; yard, dry; water, well.
- E. Fisher—Number of cows, 7; condition, good; feed, pasture; stables, good; good ventilation; yard, fair; water, spring.

Wm. Tanis—Number of cows, 8; condition, good; feed, pasture; table. good; ventilation, fair; yard, good; water, well.

- A Bum—Number of cows, 8; condition, good; feed, pasture; stables, 200d; fair ventilation; yard, good; water, well.
- J. Wingarden—Number of cows, 7; condition, fair; feed, pasture; l stables, fair; good ventilation; yard, fair; water, well.
- J. Karnemaat—Number of cows, 6; condition, good; feed, pasture; stables, fair; fair ventilation; yard, fair; water, well.

At Sparta:

- E. A. Bradford—Number of cows, 6; condition, good; feed, pasture, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- O. S. Rice—Number of cows, 12; condition, good; feed, pasture and cornmeal; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

Henry Meyers—Number of cows, 10; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry; good drainage; water, well..

James Hope—Number of cows, 8; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, dry; good drainage; water, well and spring.

- Mr. DeVass—Number of cows, 18; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry, good drainage; water, well.
- C. B. Purdy—Number of cows, 10; condition, good; feed, pasture and cornmeal; stables, good and clean; good ventilation; yard, dry; water, well.

Orson Bradford—Number of cows, 8; condition, good; feed, pasture; stables, good; fair ventilation; yard, fairly dry; fair drainage; water, well.

Allen Johnson—Number of cows, 8; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry; good drainage; water, well and spring.

Geo. McCanell—Number of cows, 10; condition, good; feed, pasture; stables, fair; fair ventilation; yard, fair; water, well.

Wm. Better—Number of cows, 8; condition, good; feed, pasture; stables, good; good ventilation; yard, dry; fairly clean; water, well and spring.

At Vicksburg:

- W. R. Southworth—Number of cows, 20; condition, good; feed, pasture and bran; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Young—Number of cows, 10; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry and fairly clean; water, well.
- C. Richardson—Number of cows, 11; condition, good; feed, pasture and bran; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- H. Southworth—Number of cows, 6; condition, good; feed, pasture and bran; stables, fairly good; fair ventilation; yard, dry; water, well.
- R. F. Mooney—Number of cows, 7; condition, good; feed, pasture and bran; stables, good and clean; yard, dry and clean; water, well.
- F. Jenkinson—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.

John Weinberg - Number of cows, 8; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well

- F. Neasmith—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and fairly clean; water, well.
- C. Rischel—Number of cows, 7; condition, good; feed, pasture and bran; stables, fair; fair ventilation; yard, dry; water, well.
- O. M. Winterly—Number of cows, 6; condition, good; feed, pasture; stables, fair, with fair ventilation; yard, dry; water, well.
- L. Oswald—Number of cows, 12; condition, good; feed, pasture; stables, good, with fair ventilation; yard, dry; water, well.

Wm. Crouch—Number of cows, 16; condition, fair; feed, pasture and hay; stables, poor, poorly ventilated; yard, fair; water, well.

J. Hetrick—Number of cows, 5; condition, good; feed, pasture and meal; stables, fair; fair ventilation; yard, fair; water, well.

David Hoch—Number of cows, 5; condition, good; feed, pasture; stables, good, with good ventilation; yard, dry and fairly clean; water, well.

Daniel Hoch—Number of cows, 6; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry; water, well.

- 8. Vroman—Number of cows, 7; condition, good and clean; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- O. Goldsmith—Number of cows, 8; condition, good; feed, pasture and meal; stables, good, with fair ventilation; yard, dry; good drainage; water, well.
- P. Dent—Number of cows, 5; condition, good; feed, pasture and bran; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Ruling cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;

2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;

3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;

4. If it is in imitation of, or is sold under the name of another article;

5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article,

whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poisonous or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

- 1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;
 - 2. They must contain nothing injurious to health;
- 3. They must not be sold in imitation of, or under the name of another article:
- 4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound:
- 5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled, "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter.

CANDY.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

CATSUP.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

· COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATES AND COCOAS.—If containing no other substances than cocoa mass, sugar and flavoring will not be classed as a compound or mixture.

CANNED GOODS.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica in size. The sale of peas or other vegetables greened with copper is prohibited.

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper, and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FARINACEOUS GOODS.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Taploca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

HONEY.—Must be pure. Cannot be mixed with glucose or other substances and sold as "Honey Compound."

JELLY.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

LARD.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquors.—Spirituous, fermented, or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing,

rectifying or preparing same in any way must brand on each barrel, cask, or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as afore-said.

MAPLE SUGAR AND MAPLE STRUP.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

MILE.—Must contain not less than 3 per cent fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives to milk is prohibited.

Molasses.—Must be branded with its true and appropriate name and must be true to same. (See Syrup.)

OLEOMARGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words, "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing eleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PARCAKE FLOURS.—If containing more than one article must be sold as a mixture or Compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

PEPPER.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer, but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard," and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words,

"Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them plain and prominent.

SYRUPS.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture" and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

LANSING MICHIGAN
ROBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS
1902

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

W. B. SNOW, -	-	-	-	-	-	- COMMISSIONE
PERLEY C. HEALD,		-	-	_	-	DEPUTY COMMISSIONER
TITTLICOUR R	_	_	_	_	_	- STATE ANALYS

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1902.

Cases pending July 1, 1902	38 11
CASES DISPOSED OF.	
Before Examining Magistrates: Defendants bound over to trial courts Defendants discharged on examination	4
In Trial Courts: Defendants convicted	6
Cases pending August 1, 1902	

PROCEEDINGS HAD DURING THE MONTH OF AUGUST.

Complaint was made August 26, in justice court of the city of Kalkaska, against Harry Hurley, charged with selling colored oleomargarine. Examination was held on the 26th and defendant bound over to the next term of the circuit court for the county of Kalkaska for trial.

Complaint was made August 8, in police court of the city of Detroit, against Chas. Addison, charged with selling colored oleomargarine. On the 9th inst. defendant waived examination and was bound over to the September term of the recorder's court of the city of Detroit for trial.

Complaint was made August 8, in the police court of the city of Detroit, against Edward Roulo, charged with selling colored oleomargarine. On the 9th inst. defendant waived examination and was bound over to the Septemeber term of the recorder's court of the city of Detroit for trial.

Complaint was made August 8, in the police court of the city of Detroit, against Francis T. Schmidt, charged with selling colored oleomargarine. On the 9th inst. defendant waived examination and was bound over to the September term of the recorder's court of the city of Detroit for trial.

Complaint was made August 8, in the police court of the city of Detroit, against J. Henry Smith and Conrad H. Smith, of the firm of Peter Smith & Son, charged with selling colored oleomargarine. On the 9th inst. defendants waived examination and were bound over to the September term of the recorder's court of the city of Detroit for trial.

Complaint was made August 8, in the police court of the city of Detroit, against Frank G. Lafer and John W. Lafer, of the firm of Lafer Bros.,

charged with selling colored oleomargarine. Examination was set for

August 26. Adjourned on request of defendant to September 2.

In the case pending in the police court of the city of Detroit against J. Henry Smith and Conrad H. Smith of the firm of Peter Smith & Son, charged with selling colored oleomargarine, defendants on the 8th inst. waived examination and were bound over to the September term of the recorder's court of the city of Detroit for trial.

In the case pending in the police court of the city of Detroit, against Francis T. Schmidt, charged with selling colored oleomargarine, defendant on the 8th inst. waived examination and was bound over to the September term of the recorder's court of the city of Detroit for trial.

In the case pending in the police court of the city of Detroit, against Felix McWilliams and Wm. A. Moore, of the firm of McWilliams & Moore, charged with selling colored oleomargarine, defendants on the 8th inst. waived examination and were bound over to the September term of the recorder's court of the city of Detroit for trial.

In the case pending in the circuit court for the county of Calhoun, against Will H. Hamilton, of the city of Battle Creek, charged with selling colored oleomargarine, defendant on the 4th inst. entered a plea of guilty. A fine of \$50 and \$10 costs was imposed by the court.

In the case pending in the circuit court for the county of St. Clair, against John Monsel, charged with selling adulterated jelly, a nolle prosequi was entered on the 29th inst. by request of prosecuting attorney.

In the case pending in the circuit court for the county of Benzie, against Albert B. Harmon, of the city of Frankfort, charged with selling colored oleomargarine, defendant on the 18th inst. entered a plea of guilty and was assessed the costs of prosecution.

In the case pending in the circuit court for the county of Wexford, against E. G. Snider, of the city of Cadillac, charged with selling colored oleomargarine, defendant on the 25th inst. entered a plea of guilty. A

fine of \$50 and costs was imposed by the court. Fine remitted.

In the case pending in the circuit court for the county of Wexford. against Frank Johnson, of the city of Cadillac, charged with selling colored oleomargarine, in which the court on February 4, last, sustained motion made by defense to quash the information on constitutional grounds, was on the 25th inst., on motion of prosecuting attorney, reinstated. Defendant on the 30th inst. entered a plea of guilty, and a fine of \$50 and costs was imposed by the court. Fine remitted.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., August 31, 1902.

Hon. W. B. Snow, Dairy and Food Commissioner:

Sir—During the month of August, 57 samples of food products have been examined, 43 being pure and 14 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Jelly Lard Milk Oleomargarine Vinegar	3 1 37 15 1	1 87 5	10 1
Totals	57	43	, 14

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

JELLY.

No. S-221. Sample of "Strawberry Flavored Jelly," from Carter & Scott, Dundee. Producer, American Tea Co., Chicago, Ill.

WaterAsh	27.88 per cent.
Ash	0.74 " "
Reducing sugar	42.25 " "
Polarization before inversion	+90.2 degrees.
Polarization after inversion	+90.2 "
Starch	Present.
Color	Artificial.

Imitation fruit jelly artificially colored.

No. S-222. Sample of "Currant Flavored Jelly," from Carter & Scott, Dundee. Producer, American Tea Co., Chicago, Ill.

Water	28.15	per	cent.
Ash	0.63	-66	**
Reducing sugar Polarization before inversion.	41.45	"	"
Polarization before inversion	-90.1	degr	rees.
Polarization after inversion	-89.5		"
Starch	Prese	nt.	
Color			

Imitation fruit jelly artificially colored.

No. S-223. Sample of "Quince Flavored Jelly," from Carter & Scott, Dundee. Producer, American Tea Co., Chicago, Ill.

Water	28.20	per	cent.
Ash	0.64	"	"
Reducing sugar	39.86		**
Polarization before inversion	-10Z.6	aeg	rees.
Polarization after inversion	-101.2		"
Starch	Prese	nt.	
Color	Artif	icial	•

Imitation fruit jelly artificially colored.

OLEOMARGARINE.

No. K-337. Sample of oleomargarine from the Morse Dry Goods Co., Grand Rapids.
Producer, The G. H. Hammond Co., Hammond, Ind.
Refractive index at 25°C. 1.4656 Reichert-Meisel Number. 0.45 Color. Yellow Azo Dye.
Oleomargarine artificially colored.
No. L-255. Sample of oleomargarine from the Morse Dry Goods Co., Grand Rapids.
Refractive index at 25°C 1.4660 Reichert-Meissl Number 0.40 Color Yellow Azo Dye.
Oleomargarine artificially colored.
No. L-256. Sample of oleomargarine from Cobbs & Mitchell Incorporated, Springvale.
Producer, The G. H. Hammond Co., Hammond, Ind.
Refractive index at 25°C. 1.4662 Reichert-Meissl Number. 0.69 Color. Yellow Azo Dye.
Oleomargarine artificially colored.
No. S-214. Sample of oleomargarine from Edward Roulo, Detroit. Producer, The Capitol City Dairy Co., Columbus, Ohio. Refractive Index at 25° C
No. S-215. Sample of oleomargarine from Chas. Addison, Detroit. Producer, The Capitol City Dairy Co., Columbus, Ohio.
Refractive Index at 25° C
Oleomargarine artificially colored.
No. S-217. Sample of oleomargarine from Francis T. Schmidt, Detroit. Producer, The G. H. Hammond Co., Hammond, Ind.
Refractive Index at 25° C
No. S-218. Sample of eleomargarine from Peter Smith & Sons, Detroit. Sold by Michigan Produce Co., Detroit, Mich. Producer, Capitol City Dairy Co., Columbus, Ohio.
Refractive Index at 25° C 1.4642 Reichert-Meissl Number 0.64 Color Annatto.
Oleomargarine artificially colored.

No. S-220. Sample of oleomargarine from Lincoln Bros., Jackson. Producer, W. J. Moxley, Chicago, Ill. Refractive Index at 25° C	
No. S-224. Sample of oleomargarine from Lafer Bros., Detroit. Refractive index at 25° C. Reichert-Meissl number. Color Ye Oleomargarine artificially colored.	0.65
No. S-225. Sample of oleomargarine from McWilliams & Moore, Do Sold by Michigan Produce Co., Detroit, Mich. Producer, Capitol City Dairy Co., Columbus, Ohio. Refractive index at 25° C Reichert-Meisel number Color Oleomargarine artificially colored.	1.4642 0.73

VINEGAR.

Producer, Price & Lucas, Louisville, Ky.			
Specific gravity	1.005	60	
Total solids	0.22	- "	44
Ash	0.07	"	• 6

No. S-213. Sample of cider vinegar from A. W. Grassle, Monroe.

Distilled vinegar colored.

INSPECTIONS.

The following places were visited by the Department's inspection force

during the month of August:

Alamo, Albion, Ann Arbor, Bay City, Brant, Charlevoix, Chassell, Detroit, Dundee, Grand Ledge, Grand Rapids, Hancock, Houghton, L'Anse, Marshall, Monroe, Plymouth, Skanee, West Bay City, Ypsilanti.

DAIRY INSPECTIONS.

Report of dairies inspected during the month of August.

At Alamo:

- W. Ward—Number of cows, 5; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- H. Cartendall—Number of cows, 6; condition, good; feed pasture; stables, good and clean; good ventilation; yard, dry, good drainage; water, well.
- H. Germain—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- E. P. Hackley—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water well.
- J. Q. Adams—Number of cows, 19; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.

Aaron Tallman—Number of cows, 23; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

J. N. Ransom—Number of cows, 32; condition, good; feed, pasture, corn meal and bran; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- J. Muff—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- A. Mott—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

At Albion:

- T. C. Rodee—Number of cows, 28; condition, good; feed, pasture, stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- C. L. Eslow—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- D. Hubbard—Number of cows, 16; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Sears—Number of cows, 6; condition, good; feed, pasture; stables, fair, good ventilation; yard, dry and clean; water, well.
- C. Banchur—Number of cows, 7; condition, good; feed, pasture; stables, fairly good; good ventilation; yard, dry and clean; water, well.
- A. E. Howell—Number of cows, 10; condition, good; feed, pasture; stables, fair; good ventilation; yard, dry and clean; water, well.
- O. Strickland—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- F. Clark—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

Shephard & Harris—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- A. J. Hunt—Number of cows, 8; condition, good; feed, pasture and corn meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- L. J. Shields—Number of cows, 30; condition, good; feed, pasture, corn meal, bran and middlings; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. R. Hartung—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.

At Brant:

J. McIntyre—Number of cows, 5; condition, good; feed, pasture; stables, fair and clean; good ventilation; yard, dry; good drainage; water, well.

- R. Bellenbaum—Number of cows, 9; condition, fair; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- O. E. Gibson—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- C. Jones—Number of cows, 5; condition, fair; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- P. Jones—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- H. Little—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

Frank Gage—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

W. Crane—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

George Ward—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- E. Higley—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. Curtis—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Thompson—Number of cows, 8; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry and clean; water, well.
- A. McCall—Number of cows, 8; condition, good; feed, pasture; stables, fair and clean; ventilation, fair; yard, dry; good drainage; water, well.
- B. Burgess—Number of cows, 6; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, dry and clean; water, well.
- W. Ward—Number of cows, 9; condition, good; feed, pasture; stables, fair and fairly clean; good ventilation; yard, dry and clean; water, well.
- J. Jennings—Number of cows, 7; condition, good; feed, pasture; stables, fair; fair ventilation; yard, fairly dry; water, well.

At Grand Ledge:

Z. Brown—Number of cows, 12; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.

Barber & Sherart—Number of cows, 42; condition, good; feed, pasture and corn meal; stables, extra good and clean; good ventilation; yard, dry; good drainage; water, well and spring.

At Marshall:

Lathrop Bros.—Number of cows, 22; condition, good; feed, pasture and corn meal; stables, cement floor, neat and clean; ventilation, good; yard, dry and clean; water, well and river.

- L. C. Calkins—Number of cows, 46; condition, good; feed, pasture; stables, good and clean; cement floor; ventilation, good; yard, dry and clean; water, well.
- W. G. Williamson—Number of cows, 25; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- Lowell & Hammond—Number of cows, 17; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- N. Vose—Number of cows, 10; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry and clean; water, well.
- J. Hughes—Number of cows, 10; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry and clean; water, well.
- G. Smith—Number of cows, 10; condition, good; feed pasture; stables, fair and clean; fair ventilation; yard, dry and clean; water, well.
- T. Lusk—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- J. H. Fountain—Number of cows, 10; condition, good; feed, pasture and oats; stables, fair and clean; fair ventilation; yard, dry and clean; water, well.
- A. Lockwood—Number of cows, 39; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

At Plymouth:

- Geo. Lee—Number of cows, 20; condition, good; feed, pasture and bran; stables, good and clean; cement floor; ventilation, good; yard, dry; good drainage; water, spring.
- E. Evart—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- F. Standard—Number of cows, 12; condition, good; feed, pasture and corn meal; stables, good and clean; cement floor; good ventilation; yard, dry and clean; water, well.

- E. J. Norris—Number of cows, 7; condition, good; feed, pasture and meal; stables, fair; yard, dry and clean; water, spring.
- J. Zanden—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- J. Henderson—Number of cows, 14; condition, good; feed, pasture; stables, good and clean; cement floor; good ventilation; yard, dry; good drainage; water, well.
- H. Aclar—Number of cows, 10; condition, good; feed, pasture; stables, fair, and fairly clean; fair ventilation; yard, dry and clean; water, well and spring.
- S. B. Stoneburner—Number of cows, 43; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well and spring.
- W. Stall—Number of cows, 6; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry; good drainage; water, well.
- F. Amerhein—Number of cows, 14; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- E. Westfall—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- E. Winhart—Number of cows, 12; condition, good; feed, pasture; stables, fair, and fairly clean; fair ventilation; yard, fairly dry and clean; water, well.
- A. Felsner—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- G. Macomber—Number of cows, 9; condition, good; feed, pasture; stables, fair and fairly clean; good ventilation; yard, dry and clean; water, well.
- W. G. Johnson—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- D. Oliver—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- W. Eckel—Number of cows, 19; condition, good; feed, pasture and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- G. Barlow—Number of cows, 14; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, spring.
- J. C. Drayton—Number of cows, 15; condition, good; feed, pasture; stables, fair and fairly clean; ventilation, good; yard, dry and clean; water, well.
- F. Ware—Number of cows, 14; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, wet; poor drainage; water, well.

At Ypsilanti:

O. A. Answorth—Number of cows, 60; condition, good; feed, pasture, ground corn, oats and bran; stables, extra good and clean; ventilation, good; yard, dry and clean; good ventilation; water, well and spring.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Ruling cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;

2. If any inferior or cheaper substance or substances have been sub-

stituted wholly or in part for it;

- 3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;
 - 4. If it is in imitation of, or is sold under the name of another article;
- 5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article,

whether manufactured or not, or, in the case of milk, if it is the product

of a diseased animal;

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poisonous

or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;

2. They must contain nothing injurious to health;

- 3. They must not be sold in imitation of, or under the name of another article;
- 4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound:
- 5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled, "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter.

Candy.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

CATSUP.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATES AND COCOAS.—If containing no other substances than cocoa mass, sugar and flavoring will not be classed as a compound or mixture.

CANNED GOODS.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica in size. The sale of peas or other vegetables greened with copper is prohibited.

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla." with the per cent of each ingredient contained therein, is not proper, and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FARINACEOUS GOODS.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Taploca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

Honey.—Must be pure. Cannot be mixed with glucose or other substances and sold as "Honey Compound."

JELLY.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

LARD.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquora.—Spirituous, fermented, or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing.

rectifying or preparing same in any way must brand on each barrel, cask, or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aformald.

MAPLE SUGAR AND MAPLE SYRUP.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

MILK.—Must contain not less than 3 per cent fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of color ing matter or preservatives to milk is prohibited.

Molasses.—Must be branded with its true and appropriate name and must be true to same. (See Syrup.)

OLEOMARGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have consplcuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words, "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica

in size

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANCAKE FLOURS.—If containing more than one article must be sold as a mixture or Compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

PEPPER.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer, but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard," and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words.

"Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter.

Packages put up for immediate delivery must be covered by wrappers on which

must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them plain and prominent.

SYRUPS.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture" and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

LANSING MICHIGAN

BOBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS
1902

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

W. B. SNOW, -	-	-		-	_		-	- COMMISSIONER
PERLEY C. HEALD,	-	-	-	_	-	-		DEPUTY COMMISSIONER
R. E. DOOLITTLE,	_	_		_	-		-	- STATE ANALYST

REGULATIONS GOVERNING THE SALE OF OLEOMARGARINE.

Because of the numerous inquiries received from dealers and others for the regulations governing the sale of oleomargarine in this State, we publish below a statement of the conditions which at present surround the sale of that product in Michigan, together with the policy of the Department in relation thereto:

Must Not Imitate Yellow Butter.

Act No. 22 of the Session Laws of 1901 prohibts the manufacture or sale of oleomargarine which is in imitation of yellow butter. This act has, in two instances, been declared constitutional by the Supreme Court of the State. The Department holds that this act not only prohibits the manufacture and sale of oleomargarine colored by the use of commercial butter colors so that it imitates the color of yellow butter, but also of oleomargarine made from such fats and oils or other ingredients that naturally give the finished product some shade of yellow causing it to look like yellow butter. Evidently this was the intention of the Legislature, for otherwise the law would be useless as already there has appeared upon the markets of this State oleomargarine of a deeper shade of yellow. the color being produced from the fats and oils used in its manufacture, than were some of the artificially colored goods before the law went into Prosecutions have been commenced against all persons handling such goods wherever found. All those dealing or who contemplate dealing in oleomargarine should therefore be careful that the product they handle does not imitate yellow butter of any perceptible shade of Under the law, the responsibility for the purity of all food products rests with the dealer handling the same, and a guarantee of purity from the manufacturer does not relieve him from that liability.

Signs Must be Posted in Room.

Section 3 of Act No. 147, Public Acts, 1889, requires that all store-keepers, proprietors of hotels, restaurants, eating saloons, boarding houses, or other places where oleomargarine is sold or furnished to persons paying for the same, must have placed on the walls of every store or room where oleomargarine is sold or furnished, a white placard on which is printed in black ink in plain Roman letters of not less than three inches in length, and not less than two inches in width, the words, "Oleomargarine Sold or Used Here." This must at all times be kept exposed in a conspicuous place so as to be readily seen by any or all persons entering the

store or room. The word "Butterine" cannot be substituted for the word "Oleomargarine" in above sign, nor can the words "butter," "creamery," or "dairy," or the name or representation of any breed of cattle or other word or words commonly used in the sale of butter be used in connection therewith.

Packages, Etc., Must Be Stamped.

Section 1 of Act No. 147, requires that all vessels, packages, rolls or parcels, from which oleomargarine is sold must be distinctly and durably printed, stamped or stenciled thereon in black letters the name "Oleomargarine," in ordinary bold-faced capital letters not less than five line pica in size, and also the name and address of the manufacturer, together with the name of each and every ingredient used or entering into the composition of the substance, in bold-faced letters not less than pica in size.

Notice and Label Necessary With Parcels Sold.

Section 2 of Act No. 147, specifies that every person selling or delivering oleomargarine shall distinctly inform the purchaser by verbal notice at the time of the sale or delivery that the same is a substitute for butter, and at the same time shall also deliver to the purchaser of each and every roll, package or parcel of such oleomargarine, a separate and distinct label, on which is plainly printed in black ink in ordinary bold faced capital letters not less than five line pica in size, the name "oleomargarine" and also the name and address of the manufacturer, together with the name of each and every article used and entering into the composition of the substance, in bold-faced letters not less than pica in size. It is the opinion of the Department that if these slips are placed on top of the package under the string and in plain view, the law in this respect is complied Dealers should see that these slips have the true name of all ingredients printed thereon. The attention of the Department has been called to samples containing cotton-seed oil, in which the slips used did not bear the name; also to another instance where the word "butter oil" was used, probably as a substitute for word cotton-seed oil. These omissions or substitutions are violations of the law, for which the dealer in whose possession the goods are found is responsible.

Stamp Required by United States Authorities.

The United States Internal Revenue Service Regulations require that: "Each retailer's package must have the name and address of the dealer printed or branded thereon, likewise the words 'pound' and 'oleomargarine' in letters not less than one-quarter of an inch square and the quantity written, printed or branded thereon in figures of the same size (one-quarter of an inch square)." It is held that: "It will not be deemed a compliance with this regulation if the word 'oleomargarine' and the other required words and figures shall be illegibly branded or printed, or so placed as to be concealed from view, by being on the inside of the package, or by folding in the stamped portion of the sheet used for wrap-

ping or otherwise. The required words must be legibly printed or branded and conspicuously placed, and no other word or business card should be placed in such juxtaposition thereto as to divert attention from the fact that the contents of the package are wholly oleomargarine."

(Regulations No. 9, Revised June, 1902, United States Revenue.)

SUPREME COURT DECISION ON ANTI-COLOR OLEOMARGARINE LAW.

On the 17th inst. the Michigan Supreme Court, in the opinion handed down in case of People vs. Phillips, re-affirmed its opinion in case of People vs. Rotter, holding the anti-color oleomargarine law constitutional. In the Rotter case, the Supreme Court held that the legislature had the power to pass the act; that it was not in violation of the Fourteenth Amendment, and Section 20 of Article 4 of the Constitution of the United States; and that the object of the act is fairly expressed in its title. case of People vs. Phillips it was further urged as a matter of defense that the respondent should have been allowed to prove, if he could, that there was a commercial standard for yellow butter and that all butter with a trace of yellow in it is not the yellow butter of commerce. The Supreme Court in affirming the conviction of the lower court holds that the sale of oleomargarine containing sufficient coloring matter to make it look like yellow butter having any perceptible shade of yellow is in violation of the statute. The decision in full will be found below, and it is urged that all interested in the manufacture or sale of this product in this State will carefully read the same.

PEOPLE vs. PHILLIPS.

(Opinion filed Sept. 17, 1902.)

Detroit Legal News (October).

Act No. 22, Public Acts of 1901 construed.—Sale of Oleomargarine colored in imitation of yellow butter.

In an action against respondent for offering for sale oleomargarine colored in imitation of yellow butter, contrary to the provisions of Act No. 22, Public Acts of 1901, the court instructed the jury that if there was sufficient coloring matter in the article to make it look like any kind of yellow butter made from unadulterated milk or cream, it would be sufficient so far as the requirement of the statute upon the question of color was concerned, and that it was not necessary that the article offered for sale have any perceptible shade of yellow, held not error.

Error to the circuit court for Kalamazoo county, John W. Adams, judge.

Appeal of John W. Phillips from a conviction under Act No. 22, P. A.

1901.—Affirmed and remanded.

Sheridan F. Master for the people (Dallas Boudeman of counsel).

Frank E. Knappen and Edwin M. Irish for respondent.

Moore, J. The respondent was convicted of having on hand with intent to sell, and offering for sale oleomargarine, colored in imitation of yellow butter, contrary to the provisions of Act No. 22 of the Legislature, passed at the session of 1901.

It is claimed by respondent this law is unconstitutional and is an invalid law. That question was decided in the very recent case of the People vs. Rotter, against the contention of respondent, and need not be discussed here. It is urged as a matter of defense, and we quote from the brief of counsel, "that the statute is only aimed against the imitation of a substance which the Legislature recognize as yellow butter, and

1, The court should take judicial notice that all butter with a trace

of yellow in it is not the yellow butter of commerce.

2, That if this is not true as a proposition of judicial notice, and the court cannot know it, then the respondent should have been allowed to

prove, if he could, that there was such a usage of commerce.

3. That the statute is vague and indefinite in not defining the elements of the statutory crime it attempts to carve out of an innocent per se, in that it gives no standard for determining what the color of yellow butter is that it is not to be imitated."

The trial judge charged the jury upon that branch of the case as follows: "It is not necessary in this case for the people to have proved that the respondent himself colored the oleomargarine if you find beyond a reasonable doubt that it was colored. The offense is just as complete, so far as this is concerned, if the respondent purchased oleomargarine colored, as above indicated. The offense as above stated consists of having the oleomargarine colored as before indicated, in his possession, with intent to sell the same, or in exposing it for sale; and if the respondent sold it in the same condition as he bought it, that there would be no defence in The respondent, gentlemen of the jury, is not charged in this information with selling this article; and if you find beyond a reasonable doubt he sold it as claimed by the people in the testimony offered, you may consider this fact on the question of whether respondent had or did not have the article in his possession for the purpose of selling it. And you must not consider it for any other purpose. If you find beyond a reasonable doubt that respondent did sell the article mentioned in the information to the parties claimed by the people, that would satisfy the statute upon the question of intent to sell. It is not necessary in this case to entitle the people to a conviction, that the oleomargarine should have been colored to represent any particular kind of yellow butter. That is, such yellow butter as the statute mentions, and as I have indicated to you the statute mentions. If the coloring was put into it, and by using such coloring the oleomargarine was in imitation of light yellow butter, such as the statute mentions, that is, yellow butter produced from pure, unadulterated milk or cream from the same, the offense is committed just the same as if it had been colored to represent darker yellow butter. If you find it to have been oleomargarine and was colored in such a manner as to be in imitation of any kind of yellow butter, that would satisfy the statute upon the requirement of the question of color. Yellow butter I define to be any butter produced from pure, unadulterated milk or cream of the same having a yellow color.

It is necessary in order for the jury to convict the respondent, for you to find beyond all reasonable doubt that the article in the package sold was colored in imitation of yellow butter produced from pure unadulter-

ated milk or cream of the same. If you find beyond a reasonable doubt under the testimony in this case that there was some coloring matter in this article, still if you find that there was not enough coloring matter in this article to cause it to look like yellow butter having a perceptible shade of yellow, said butter having been produced from unadulterated milk or cream from the same, then you must acquit. But if you find beyond a reasonable doubt that there was coloring matter in said article and sufficient coloring matter therein to make it look like yellow butter, having any perceptible shade of yellow, said butter having been made from unadulterated milk or cream from the same, that would be sufficient so far as the requirement of the statute upon the question of coloration is concerned."

We think this was a proper construction of the language used in the statute.

The conviction is affirmed and the case remanded for further proceedings.

Long, J., did not sit. The other justices concurred.

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1902.	
Cases pending July 1, 1902. Cases commenced since said date. Cases nolle prossed.	3
CASES DISPOSED OF.	
Before Examining Magistrates: Defendants bound over to trial courts. Defendants discharged on examination	1
In Trial Courts: Defendants convicted	1
Cases pending October 1, 1902	3

PROCEEDINGS HAD DURING THE MONTH OF SEPTEMBER.

Complaint was made July 10, in justice court of the city of Wolverine, against Alfred Cook, charged with selling colored oleomargarine. Examination was held on July 18 and defendant bound over to the September term of the circuit court for the county of Cheboygan for trial. On September 22 defendant was found guilty and a fine of \$50 was imposed by the court.

Complaint was made July 12, in justice court of the city of Grayling, against Chas. F. Kelly, charged with selling colored oleomargarine. Defendant waived examination and was bound over to the September term of the circuit court for the county of Crawford for trial. On September 15, on motion of defense case was adjourned until the January term of court.

Complaint was made September 9, in police court of the city of Grand Bapids, against the Great Atlantic and Pacific Tea Co., charged with selling adulterated pepper. On the 19th inst., defendant waived examination and was bound over to the superior court of the city of Grand Bapids for trial. On the 22nd inst., defendant was found guilty and a fine of \$50 was imposed by the court.

Complaint was made September 9, in police court of the city of Grand Rapids, against Geo. M. Morse, of the firm The Morse Dry Goods Co., for selling colored oleomargarine. Examination was set for September 26,

and on said date adjourned until October 10.

Complaint was made September 9, in police court of the city of Grand Rapids, against F. J. Dettenthaler of "The Dettenthaler Market," charged with selling oleomargarine which was in imitation of yellow butter. Examination was set for September 26, and on said date, after introduction of testimony, case was adjourned until October 10 for argument.

In the case pending in the circuit court for the county of Emmet, against A. B. Thompson of Petoskey, charged with selling colored oleomargarine, defendant on the 17th inst. entered a plea of guilty and a

fine of \$51 was imposed by the court.

In the case pending in the circuit court for the county of Emmet, against Wm. A. Major, charged with selling colored oleomargarine, defendant on the 17th inst. entered a plea of guilty and a fine of \$51 was imposed by the court.

In the case pending in the circuit court for the county of Emmet, against Adolph Fotchman, charged with selling colored oleomargarine, defendant on the 17th inst. entered a plea of guilty and a fine of \$51 was

imposed by the court.

In the case pending for sentence in the circuit court for the county of Emmet, against Geo. W. Rotter, charged with selling colored oleomargarine, on the 17th inst. a fine of \$51 was imposed by the court.

The case pending in the circuit court for the county of Emmet, against The Colby-Hinkley Co., charged with selling colored oleomargarine, was

on the 17th inst. adjourned until the November term of court.

In the case pending for sentence in the circuit court for the county of Cheboygan, against Moses DeGowin, charged with selling colored oleomargarine, on the 22nd inst. the sentence was suspended.

In the case pending in the circuit court for the county of Otsego, against Wm. White, charged with selling colored oleomargarine, defendant on the 22nd inst, entered a plea of guilty and a fine of \$50 and costs was imposed by the court.

The case pending in the circuit court for the county of Otsego, against Wm. White, charged with selling colored oleomargarine, was on the

22nd inst. nolle prossed.

In the case pending in the circuit court for the county of Grand Traverse, against Fay S. Hamlin of the Enterprise Grocery Co., charged with selling colored oleomargarine, defendant on the 22nd inst. entered a plea of guilty and a fine of \$50 was imposed by the court.

In the case pending in police court in the city of Detroit, against Frank G. Lafer and John W. Lafer, of the firm of Lafer Bros., charged with selling colored oleomargarine, defendants were on the 24th inst. bound over

to the recorder's court for the city of Detroit, for trial.

2

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., Sept. 30, 1902.

Hon. W. B. Snow, Dairy and Food Commissioner:

Sir—During the month of September, 26 samples of food products have been examined, 11 being pure and 15 adultered.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Extracts Jelly Milk	9 6 7	1 2 7	8
Oleomargarine Pepper Vinegar	1 1 2	1	
Totals	26	11	15

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

EXTRACTS.
No. K-341. Sample of "Extract of Vanilla," from B. A. Almy, Middleville. Sold by J. Starrat & Co., Detroit, Mich. Producer, J. Starrat & Co., Detroit, Mich.
Solids
No. K-342. Sample of "Vienna Brand Flavoring Extract of Vanilla," from F. M. Quick & Co., Nashville.
Sold by The J. P. Dieter Co., Chicago, Ill. Producer, The J. P. Dieter Co., Chicago, Ill.
Solids
No. K-343. Sample of "Vienna Brand Flavoring Extract of Lemon," from F. M. Quick & Co., Nashville.
Sold by The J. P. Dieter Co., Chicago, Ill.
Producer, The J. P. Dieter Co., Chicago, Ill. Specific gravity. 0.94106. Solids. 0.05 per cent. Alcohol. 39.16 " " Lemon oil. None. Color. Yellow Coal Tar Dye. Contains no lemon oil.
No. S-216. Sample of "Dieter's Double Vanilla Flavoring." Sold by The Edward Henkel Co., Detroit, Mich. Producer, The J. P. Dieter Co., Chicago, Ill.
Solids 16.17 per cent. Vanillin 0.417 " " Coumarin None. Alcohol 15.59 " " Sugar 10.00 " " Color Foreign.

Contains foreign coloring matter and probably added vanillin.

No. S-226. Sample of "Artificial Extract of Strawberry."

C. 11. W. C. William B. A. C. S. Marketty.
Sold by E. C. Harley & Co., Dayton, Ohio.
Solids
Alcohol
Conpound ethers
Not salable as an extract.
No. S-227. Sample of "Artificial Extract of Pineapple."
Sold by E. C. Harley & Co. Dayton, Ohio.
Solids
Glycerine
Alcohol
Compound ethers
Coloring matter
Not salable as an extract.
No. L-258. Sample of "Emblem Triple Extract of Vanilla, from Mrs. J Stewart, Thompsonville.
Sold by Clark, Jewell, Wells Co., Grand Rapids, Mich. Producer, Clark, Jewell, Wells Co., Grand Rapids, Mich.
Solids 8.95 per cent. Vanillin 0.117 " Coumarin None. Alcohol 16.28 " Sugar 7.00 " Color Coal Tar Dyc.
Contains foreign coloring matter.
No. L-259. Sample of "Standard Extract of Vanilla" from S. W. Porter, No port. Sold by The Hannah-Lay Mercantile Co., Traverse City, Mich.
Producer, Atwood & Steele, Chicago, Ill.
Solids. 9.10 per cent. Vanillin. 0.016 " " Coumarin. 0.040 " " Alcohol. 15.10 " " Sugar. 8.50 " " Coloring matter.
Sample is mixture or compound and is not properly labeled.
Sample is minimize of compound and is not properly mocied.
JELLY.
No. L-260. Sample of "Pure Fruit Jelly, Currant," from Kehl Bros., North

WaterAsh	33.06 per cent.
Ash	0.47 " "
Reducing sugar	50.98 " "
Reducing sugar	-2.4 degrees.
Polarization after inversion	-18.3
Starch	Present.
Color	

Not a pure currant jelly.

No. L-261. Sample of "Pure Fruit Jelly, Raspberry," from Kehl Bros., Northport.

Sold by Reid, Murdock & Co., Chicago, Ill.

Water Ash	32.52 0.35	per	cent.
Reducing sugar	47.57	"	66
Polarization before inversion	1.8	degr	ees.
Polarization after inversion	-21.1	·	"
Starch	Prese	nt.	
Color	Artifi	cial.	

Not a pure raspberry jelly.

No. L-263. Sample of "Pure Fruit Jelly, Grape," from Kehl Bros., Northport. Sold by Reid Murdock & Co., Chicago, Ill.

WaterAsh	32.48 per cent.
Ash	0.37 - " "
Reducing sugar	38.67 " "
Polarization before inversion	+9.9 degrees.
Polarization after inversion	-19.8 ''
Starch	
Color	Artificial.

Not a pure grape jelly.

No. L-265. Sample of "Pure Fruit Jelly, Strawberry," from Kehl Bros., Northport.

Sold by Reid, Murdock & Co., Chicago, Ill.

Water	29.17 per	cent.
Ash		"
Reducing Sugar	57.75 "	6.6
Reducing Sugar	-13.6 degr	ees.
Polarization after inversion	-22.4	
Starch		
Color	Artificial.	

Not a pure strawberry jelly.

OLEOMARGARINE.

No. K-338. Sample of oleomargarine from Dettenthaler Market, Grand Rapids. Producer, Wm. J. Moxley, Chicago, Ill.

Refractive Index at 25° C	1.4660
Reichert-Meissl Number	0.27
Contains ingredients that cause it to look like yellow butter.	

VINEGAR.

No. K-340. Sample of cider vinegar from M. H. Barber, Grand Rapids. Sold by D. R. Parish, Grand Rapids, Mich.

Producer, D. R. Parish, Grand Rapids, Mich.

Specific gravity	1.0189	
Acid. as acetic	3.62 per	cent.
Total solids	3.66 ''	"
Ash	0.58 ''	
lamana 9 9 4 49 4 49		

Below standard in acid strength.

No. K-345. Sample of cider vinegar from W. C. Amphlett, Ionia. Sold by A. W. Strong, Ionia, Mich.

Producer, A. W. Strong, Ionia, Mich.

Specific Gravity	1.018	3	4
Acid, as acetic	3,30 4 99	per	cent.
Ash	0.35	66	"
Below standard in acid strength.			

INSPECTIONS.

The following places were visited by the Department's inspection force

during the month of September:

Baraga, Bay City, Big Rapids, Bradley, Buchanan, Calumet, Cassopolis, Centreville, Charlotte, Chassell, Detroit, Elsie, Fennville, Freeport, Galesburgh, Galien, Grand Rapids, Hartford, Hickory Corners, Hillsdale, Homer, Ionia, Ithaca, Laurium, Luther, Lyons, Middleville, Monroe, Muir, Nashville, Northport, Opechee, Paw Paw, Sherman, South Bay City, Thompsonville, Three Oaks, Union City, Vermontville, Wayland, West Bay City, Woodland.

DAIRY INSPECTIONS.

Report of dairies inspected during the month of September.

At Bradley:

- C. C. Rogers—Number of cows, 17; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well and spring.
- G. W. Wait—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- W. Jones-Number of cows, 11; condition, good; feed, pasture; stables, fair, with fair ventilation; yard, dry and clean; water, well.
- D. Crab—Number of cows, 9; condition, good; feed, pasture, stables, good and clean; good ventilation; yard, dry and clean; water, well.
- Miner & Wood—Number of cows, 9; condition, good; feed, pasture; stables, poor; ventilation, poor; yard, fair and fairly clean; water, well.
- H. F. Buskirk—Number of cows, 20; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
 - Sheldon & Muir—Number of cows, 20; condition, good; feed, pasture;

stables, good and clean; good ventilation; yard, dry and clean; water. well.

A. N. Baker—Number of cows, 9; condition, good; feed, pasture, stables, good and clean; fair ventilation; yard, dry and clean; water, well.

At Buchanan:

- Allen & Boyle—Number of cows, 22; condition, good; feed, pasture and cornmeal; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- H. P. Smith—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Fair—Number of cows, 5; condition, good; feed, pasture; stables, poor; poor ventilation; yard, fair; water, well.
- G. W. Lee—Number of cows, 8; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- F. Noggle—Number of cows, 5; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, dry; fair drainage; water, spring.

At Cassopolis:

John Van Ripper—Number of cows, 30; condition, good; feed, pasture, ground rye and oats; stables, fair and clean; fair ventilation; yard, dry and clean; water, well.

- G. A. Rickard—Number of cows, 5; condition, good; feed pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- W. C. Harris—Number of cows, 5; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, dry and clean; water, well.
- C. H. Kummerlin—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. Stetch—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- F. Lamb—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- J. G. Hayden—Number of cows, 24; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- J. I. Robinson—Number of cows, 20; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.

- W. Shute—Number of cows, 8; condition, good; feed, pasture and grain; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- W. B. Lane—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- M. Cook—Number of cows, 16; condition, good; feed, pasture and corn meal; stables, good and clean; ventilation, good; yard, dry; good drainage; water, well.

At Centreville:

- R. Cauffman—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- F. Kuecht—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- C. Wahl—Number of cows, 5; condition, good; feed, pasture; stables, fair and clean; fair ventilation; yard, dry and clean; water, well.
- L. Wiles—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- F. W. Smith—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- C. Myers—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, well.
- H. Laubach—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, well.
- C. Truckammiller—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

At Charlotte:

- D. T. Sheldon—Number of cows, 7; condition, good; feed, pasture and corn; stables, fair and clean; fair ventilation; yard, dry and clean; water, well.
- G. Crusan—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry; good drainage; water, well.
- T. Litchfield—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry; good drainage; water, well.

- H. Davis—Number of cows, 14; condition, good; feed, pasture and grain; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- F. Spicer—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- J. Bryan—Number of cows, 10; condition, good; feed, pasture and sowed corn; stables, good and clean; fair ventilation; yard, dry and clean; good drainage; water, well.
- L. Edick—Number of cows, 14; condition, good; feed, pasture, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- J. P. Perkins—Number of cows, 7; condition, good; feed, pasture and meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- J. McCrassen—Number of cows, 8; condition, good; feed, pasture and grain; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- O. P. Morse—Number of cows, 6; condition, good; feed, pasture and meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- W. W. Meritt—Number of cows, 5; condition, good; feed, pasture; stables, good; fair ventilation; yard, dry and clean; water, well.
- R. H. Bahn—Number of cows, 6; condition, good; feed, pasture; stables, good; fair ventilation; yard, dry and clean; water, well.
- F. Martin—Number of cows, 7; condition, good; feed, pasture and grain; stables, extra good and clean; yard, dry and clean; good drainage; water, well.
- J. R. Eliott—Number of cows, 14; condition, good; feed, pasture, ground corn and oats; stables, fair and clean; good ventilation; yard, dry and clean; water, well.
- F. Smith—Number of cows, 12; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- H. Perken—Number of cows, 5; condition, good; feed, pasture, stables, fair and fairly clean; fair ventilation; yard, dry; good drainage; water. well.
- H. Gibbs—Number of cows, 7; condition, good; feed. pasture; stables, fair; fair ventilation; yard, dry and clean; water, well.
- J. Frier—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

J. J. Creitz—Number of cows, 10; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.

At Elsie:

- J. Watson—Number of cows, 17; condition, good; feed, pasture; stables, fairly good and clean; fair ventilation; yard, fair; water, spring.
- A. Van Dusen—Number of cows, 17; condition, good; feed, pasture; stables, extra good and clean; ventilation, good; yard, fair; water, well and spring.
- H. Brown—Number of cows, 11; condition, good; feed, pasture; stables, good and clean; good ventilation; yard fair; water, well.
- M. L. Tillotson—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, spring.
- L. G. Bates—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair and clean; water, well.
- H. F. Lewis—Number of cows, 9; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.
- C. H. Warner—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- E. Lewis—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- B. Scott—Number of cows, 10; condition, good; feed, pasture; stables, fair and clean; fair ventilation; yard, fair; water, well.
- C. Emmert—Number of cows, 14; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, clean; water, well.
- E. Holteman—Number of cows, 8; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, spring.
- H. Van Dusen—Number of cows, 9; condition, good; feed, pasture; stables, rebuilding; yard, fair and fairly dry; water, well.
- E. Heince—Number of cows, 6; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.
- E. E. Lee—Number of cows, 45; condition, extra good; feed, pasture, bran and middlings; stables, good and clean; good ventilation; yard, fair and fairly clean; water, well.
- L. B. Creger—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- O. Hicks—Number of cows, 7; condition, good; feed, pasture; stables, fairly good and clean; fair ventilation; yard, fair; water, well.

- W. Day—Number of cows, 14; condition, good; feed, pasture; stables, fairly good; fair ventilation; yard, fair; water, spring.
- A. Tabor—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- B. Gorrell—Number of cows, 10; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.
- L. Bennett—Number of cows, 7; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, spring.
- Mrs. C. Bennett—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well and spring.
- A. Williams—Number of cows, 25; condition, good; feed, peasture; stables, good and clean; good ventilation; yard, fair and clean; water, well.
- F. Taylor—Number of cows, 26; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
 - A. Valentine—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, spring.
 - W. Crumm—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- G. Cobb—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well and spring.
- S. Squires—Number of cows, 13; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.
- C. H. Kline—Number of cows, 12; condition, good; feed, pasture; stables, fair and clean; fair ventilation; yard, fair; water, well and spring.
- H. F. Shilenberger—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- G. W. Bower—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, spring.
- A. W. Chamberlain—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- B. O. Ackmoody—Number of cows, 11; condition, good; feed, pasture: stables, good and clean; good ventilation; yard, dry and clean; water, well.
- A. Love—Number of cows, 9; condition, good; feed, pasture; stables, fair and fairly clean; yard, fair; fair ventilation; water, well.

At Freeport:

- W. H. Bird—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- O. L. Newton—Number of cows, 7; condition, fine; feed, pasture; stables, fair and clean; fair ventilation; yard, dry and clean; water, well.
- F. Winger—Number of cows, 20; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- M. Harrington—Number of cows, 6; condition, fair; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, dry; good drainage; water, well.
- H. Eckert—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. Lawler—Number of cows, 5; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- W. Parker—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Parker—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; good drainage; water, well.
- T. Cargon—Number of cows, 10; condition, good; feed, pasture; stables, fair and clean; yard, dry; good drainage; fair ventilation; water, well.
- E. Gray—Number of cows, 11; condition, good; feed, pasture; stables, good and clean; yard, dry and clean; good drainage; ventilation, good; water, well.
- A. B. Steckle—Number of cows, 21; condition, good; feed, pasture; stables, good and clean; yard, dry and clean; good ventilation; water, well.

At Gallen:

- A. Roundy—Number of cows, 20; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, spring.
- J. Norman—Number of cows, 6; condition, good; feed, pasture; stables, poor; ventilation, poor; yard, fair; water, well.
- J. Brinket—Number of cows, 5; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, dry and clean; water, well and spring.
- Mrs. M. Stonner—Number of cows, 6; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair and fairly clean; water, well and spring.

- G. Bohn—Number of cows, 10; condition, good; feed, pasture; stables, fair and clean; fair ventilation; yard, dry and clean; water, well.
- J. Wedel—Number of cows, 8; condition, good; feed, pasture; stables, fair; ventilation, fair; yard, fair and fairly dry; water, well.
- P. Earich—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, well.

At Hickory Corners:

- W. Lyons—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- J. Frick—Number of cows, 10; condition, good; feed, pasture; stables, good; ventilation, fair; yard, dry and clean; water, well.
- A. E. Bressee—Number of cows, 7; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, dry and clean; water, well.
- N. Chapin—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, well.
- F. Lawrence—Number of cows, 5; condition, good; feed, pasture; stables, good and clean; yard, dry; good drainage; water, well.
- H. Barnes—Number of cows, 5; condition, good; feed, pasture; stables. good and clean; fair ventilation; yard, dry and clean; water, well.
- J. McKensey—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- L. Edmonds—Number of cows, 12; condition, good; feed, pasture; stables, good; good ventilation; yard, dry and clean; water, well.
- H. Bellinger—Number of cows, 10; condition, good; feed, pasture: stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- H. Wickwire—Number of cows, 12; condition, good; feed, pasture: stables, good and clean; good ventilation; yard, dry; good drainage: water, well.
- T. Wells—Number of cows, 5; condition, good; feed, pasture; stables. good and clean; fair ventilation; yard, dry; good drainage; water, well.
- E. Grinder—Number of cows, 6; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, dry; fair drainage; water, well.

At Ithaca:

John Sales—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; water, spring.

- Azen Rabeler—Number of cows, 14; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, well.
- V. R. Russell—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- W. F. Neldred—Number of cows, 27; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair and fairly dry; water, city.

At Middleville:

- J. Anbil—Number of cows, 10; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; vard, dry and clean; water, well.
- B. Campbell—Number of cows, 12; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well and lake.
- J. Otto—Number of cows, 10; condition, good; feed, pasture; stables, fair; fair ventilation; yard, fair; good drainage; water, well.
- E. J. McNaughton—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Senesby—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Dowerman—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well and spring.
- J. Brought—Number of cows. 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, spring.
- Griffith & Smith—Number of cows, 14; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- R. Baker—Number of cows, 16; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- E. Bennett—Number of cows, 15; condition, good; feed, pasture; stables, poor; poor ventilation; yard, fair; water, well.
- E. S. Grosfend—Number of cows, 13; condition, good; feed, pasture; stables, dirty and dusty; yard, fair and dry; water, well.
- C. R. Convers—Number of cows. 17; condition, good; feed. pasture, bran and middlings; stables, fair and clean; fair ventilation; yard, dry and clean; water, spring.

- A. Church—Number of cows, 5; condition, good; feed, pasture; stables, fair with fair ventilation; yard, dry and fairly clean; water, well.
- J. Clark—Number of cows, 6; condition, good; feed, pasture; stables, fair; fair ventilation; yard, dry and clean; water, well.
- S. J. Weaver—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- I. Gray—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- W. Cridler—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; vard, dry and clean; water, well.

At Three Oaks:

- E. K. Warren—Number of cows, 110; condition, good; feed, pasture and cut corn; stables, good and clean; nicely whitewashed; good ventilation; yard, dry and clean; good drainage; water, well and spring.
- E. L. Kelly—Number of cows, 39; condition, good; feed, pasture and cut corn; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well and spring.
- E. G. Thomas—Number of cows, 19; condition, good; feed, pasture; stables, good and clean; fair ventilation; yards, dry and clean; water, well.
- S. M. Copeland—Number of cows. 14; condition, good; feed, pasture, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- C. M. Reynolds—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, well.
- N. C. Wilson—Number of cows, 5; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fairly dry; water, well.
- C. Close—Number of cows. 14; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- E. H. Wright—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- G. Shelley—Number of cows, 7; condition, good; feed, pasture; stables, good; fair ventilation; yard, fair; water, well.
- A. C. Copeland—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- A. F. Witt—Number of cows, 24; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fair and fairly clean; water, well.
- J. Gailler—Number of cows, 7; condition, good; feed, pasture; stables, good; fair ventilation; yard, fair; water, well.
- M. Rist—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, well.
- L. Heise—Number of cows, 6; condition, good; feed, pasture; stables, good; fair ventilation; yard, fairly dry; water, well.
- M. Howser—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and fairly clean; water, well.
- J. Schwark—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair and fairly dry; water, well.

Fritz Kluth—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

- G. Miller—Number of cows, 5; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- C. Crassow—Number of cows, 10; condition, good; feed, pasture; stables, poor; ventilation, poor; yard, dry and clean; water, well.

At Vermontville:

- L. S. Cotton—Number of cows, 22; condition, good; feed, pasture and corn meal; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well and creek.
- H. S. Dickson—Number of cows, 20; condition, good; feed, pasture and grain; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- D. W. Joppy—Number of cows, 10; condition, good; feed, pasture and meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- J. N. Hawkins—Number of cows, 8; condition, good; feed, pasture and grain; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- D. W. Smith—Number of cows, 6; condition, good; feed, pasture and meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- 8. Mosher—Number of cows, 8; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- S. Gutchis—Number of cows, 7; condition, good; feed, pasture and meal; stables, good and clean; fair ventilation; yard, dry and clean; water, well.

At Wayland:

- A. E. Sias—Number of cows, 12; condition, good; feed, pasture; stables, poor and dusty; poor ventilation; yard, dry; water, well.
- F. Jones—Number of cows, 5; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- A. E. Chapman—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, well.
- H. P. Hudson—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; cement floor; fair ventilation; yard, dry; water, well.
- R. Smith—Number of cows, 5; condition, good; feed, pasture; stables. fair; fair ventilation; yard, dry and clean; water, well.
- C. D. Carpenter—Number of cows, 5; condition, good; feed, pasture; stables, rebuilding and repairing; yard, dry and clean; water, well.
- E. P. Hersey—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water. spring.
- F. Schwartz—Number of cows, 11; condition, good; feed, pasture; stables, good and clean; cement floor; fair ventilation; yard, dry and clean; water, well.
- F. Levenduski—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water. well.
- W. Levenduski—Number of cows, 5; condition, good; feed, pasture; stables, fair with fair ventilation; yard dry and fairly clean; water, spring.
- M. C. Haywood—Number of cows, 11; condition good; feed, pasture; stables, fair with fair ventilation; yard, fairly dry and clean; water. spring.
- C. Calkins—Number of cows, 5; condition, good; feed, pasture; stables, poor and dirty; poor ventilation, yard, fair and fairly clean; water, well.
- C. H. Brush—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; cement floor; good ventilation; yard, dry and clean; water, spring.
- L. Jawaski—Number of cows, 8; condition, good; feed, pasture; stables. cement floor, fairly clean; fair ventilation; yard, dry and clean; water. well.
- J. Norwalk—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water. spring.
- J. H. Fenner—Number of cows, 11; condition, good; feed, pasture; stables, cement floor, clean; good ventilation; yard, dry and clean; water, well.

- W. Calkins—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, spring.
- S. Conrad—Number of cows, 11; condition, good; feed, pasture; stables, good, cement floor; fair ventilation; yard, dry and clean; water, well.
- E. Jordan—Number of cows, 7; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, dry; fair drainage; water, spring.

At Woodland:

- H. E. Rising—Number of cows, 15; condition, good; feed, pasture and grain; stables, good and clean; yard, dry; good drainage; fair ventilation; water, well.
- J. Griebel—Number of cows, 8; condition; good; feed, pasture; stables, good and clean; yard, dry and clean; fair ventilation; water, well.
- J. J. Eckart—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; yard, dry and clean; good ventilation; water, well.
- W. Barnum—Number of cows, 8; condition, good; feed, pasture; stables, good and fairly clean; yard, dry and clean; good ventilation; water, well.
- O. D. Stevens—Number of cows, 11; condition, good; feed, pasture and meal; stables, good and clean; yard, dry and clean; good ventilation; water, well.
- O. Bartinger—Number of cows, 8; condition, good; feed, pasture and grain; stables, good and clean; yard, dry and clean; fair ventilation; water, well.
- I. Smith—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; yard, dry; good drainage; fair ventilation; water, well.
- S. Sprinkett—Number of cows, 8; condition, good; feed, pasture; stables, fair and clean; yard, dry and clean; fair ventilation; water, well.
- F. Schray—Number of cows, 6; condition, good; feed, pasture; stables, fair and clean; yard, dry; good drainage; fair ventilation; water, well.
- H. Curtiss—Number of cows, 8; condition, good; feed, pasture and meal; stables, good and clean; yard, dry; good drainage; fair ventilation; water, well.
- C. Young—Number of cows, 7; condition, good; feed, pasture; stables, fair and clean; yard, dry and clean; fair ventilation; water, well.
- B. Shray—Number of cows, 5; condition, good; feed, pasture; stables, fair and clean; yard, dry; good drainage; fair ventilation; water, well.
- L. Poorman—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; yard, dry and clean; good ventilation; water, well.
- I. H. Eddy—Number of cows, 8; condition, good; feed, pasture and meal; stables, good and clean; yard, dry and clean; good ventilation; water, well.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;

2. If any inferior or cheaper substance or substances have been sub-

stituted wholly or in part for it;

- 3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;
 - 4. If it is in imitation of, or is sold under the name of another article;
- 5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poisonous

or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof:

2. They must contain nothing injurious to health;

3. They must not be sold in imitation of, or under the name of another article;

4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound;

5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled, "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter. Candy.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health. Carsur.—All packages containing same must bear the name and address of the

manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.-If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATES AND COCOAS.—If containing no other substances than cocoa mass

sugar and flavoring will not be classed as a compound or mixture.

CANNED GOODS.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica in size. The sale of peas or other vegetables greened with copper is prohibited.

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

EXTRACTS. FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FARINACEOUS GOODS.-Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear

the name and address of the manufacturer or compounder thereof.

HONEY.-Must be pure. Cannot be mixed with glucose or other substances and

sold as "Honey Compound."

Jelly.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

LARD.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquors.—Spirituous, fermented, or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as afore-

MAPLE SUGAR AND MAPLE SYRUP .- Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple

Syrup Compound."

Milk.—Must contain not less than 3 per cent fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives to milk is prohibited.

Molasses.—Must be branded with its true and appropriate name and must be

true to same. (See Syrup.)

OLEOMARGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale-

or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing eleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters. not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANCAKE FLOURS.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

PEPPER.—All black pepper shall contain not more than six and one-half per centash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard" and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed

in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them

plain and prominent.

Syaups.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture" and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures. shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

LANSING MICHIGAN
ROBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS

shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

LANSING MICHIGAN

ROBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS
1902

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

w. b. snow, -	-	-		-		-		-	-	COMMISSION	ER
PERLEY C. HEALD,	-	•	-		_		-		DEPUTY	COMMISSION	ER
D E DOOLITTLE	_	_		_		_		_	_ 8	WATE ANALY	'eT

THE LEMON EXTRACT QUESTION.

From recent investigation the Department finds that many of the extract manufacturers are placing upon the markets of the state lemon extracts of a very low quality, while a few are complying with the law in every respect. Some have even gone so far as to place upon the markets a so-called lemon extract that contains no lemon oil or other property of the lemon at all. It is made from very dilute alcohol with a little lemon flavor and colored to imitate the true extract. The manufacture and sale of such products for lemon extract is held by the Department to be an open violation of the law. Several manufacturers are now in court for such violation. In the future all extracts of lemon must comply with the law in every respect by conforming with the United States Pharmacopœia definition, i. e., they must contain 5 per cent. of lemon oil and have no other coloring except that from the lemon peel. Manufacturers and dealers must see that all extracts of lemon not in conformity with the law are removed from the markets of this state on or before January 1, 1903; otherwise they will be classed as willful violators.

2

4

LEMON EXTRACT.

BY R. E. DOOLITTLE.

The extract, spirit, or essence of lemon of the United States Pharmacopæia is a five per cent. solution (by volume) of oil of lemon in strong alcohol, together with the flavoring, coloring and other extractive matters of the lemon peel. The formula given for its preparation is as follows:

Dissolve the oil of lemon in 900 cubic centimeters of deodorized alcohol, add the lemon peel and mascerate for twenty-four hours. Then filter through paper, and add, through the filter, enough deodorized alcohol to make the spirit measure 1,000 cubic centimeters.

Extracts made by this formulæ leave nothing to be desired and are generally accepted as the standard of purity and strength for commercial extracts.

Lemon oil is obtained by various processes from the fresh peel of the ordinary lemon. It is produced principally in the countries of southern Europe bordering on the Mediterranean sea. The greater part of the oil of commerce comes from what is known as the district of Messina which embraces the northeastern portion of the island of Sicily and the adjacent mainland to the west. It is imported to this country in sealed coppers of from 1 to 100 lbs each. The best grades of the oil are produced by simple expression; the inferior grades by distillation.

The lemon peel, as its name implies, is the rind of the ordinary lemon. It has a fragrant odor and a peculiarly bitter, aromatic taste. In experiments made in connection with this investigation it has been shown that the use of the lemon peel in the preparation of lemon extract is very essential. It not only makes a noticeable difference in the color and flavor of the extract itself but also in its qualities in cakes, frostings, etc. Dr. Scoville of the Massachusetts College of Pharmacy reports, as results of experiments carried out by Miss Bertha M. Haynes, that "without the peel the flavor appears thinner and less characteristic."*

Five extracts of lemon have been made in the laboratory using pure oil of lemon and lemon peel according to formulæ of the United States Pharmacopæia. The results of the analyses of these five extracts are found in Table I.

[†]Bulletin of Pharmacy, Vol. XVI. No. 5. *United States Pharmacopoeia, 1890, page 375.

TABLE 1.--Analysis of Lenwn Extructs made in Lahoratory.

		DAL				•	-
-Pjiro) to xet	Refractive in	1.4704	1.4704	1.4706	1.4704	1.4694
-lgh	o jo es	Specific grav	0.8670	0.8675	0.8668	0.8660	0.8666
bre-	dex of	ai evitective in the interest of the contraction of	1.4088	1.4694	1.4001	1.4001	1.4086
	By ipitation.	By weight.	50. 28.	5.28	5.28 82.38	5.28	\$. \$3.
n oll.	B	By volume, per cent.	9.00	2.00	2.00	5.00	200.9
Lemon off	By polarization.	By weight, per cent.	5.36	5.8	5.30	5.40	5.23
:	B	By volume,* per cent.	5.12	5.15	6.16	5.18	6.00
·mm	200 200	Polarization. tube. Degr	+16.4	+16.5	+16.5	+16.8	+16.0
	•	Ash, per cent	0.006	900 0	0.007	0.00	9000
	70	Solids, per ce	0.88	0.85	98.0	0.78	0.70
Det.	veight,	Sent.	25 .	87.48	86 86	86.24	88 .70
-19	Upa ot	rary officeds O°c.či toart	0.8812	0.8209	0.8217	0.8228	0.8822
Brand of oil used.				Sicilian	From Eimer & Amend	Local	Local

Number.

*Factor 3.2 used.

A good lemon extract when mixed with an equal quantity of water becomes cloudy from the separation of the oil which finally rises to the surface. This simple test is a reliable one and may be easily performed by the groceryman or housewife when purchasing lemon extracts.

Adulteration of Lemon Extracts:—Probably no other article of food on our market is so grossly adulterated as lemon extract. In the manufacture of lemon extract the alcohol is much more expensive in the proportions required than the lemon oil or lemon peel. The manufacturer may (and in many cases I believe does) use the required amount of lemon oil but because of its high price he seeks to reduce the amount of alcohol. But lemon oil is soluble only in strong alcohol and the addition of any water throws it out of solution; and the subsequent filtering of the resulting cloudy product through magnesia to clearify, as is the common practice, removes the oil entirely, it being left behind with the magnesia on the filter. It is true that there is a certain taste and odor of the lemon present in such a product because even dilute alcohol when slowly percolating through magnesia saturated with lemon oil will abstract therefrom some of the flavor, but it is not comparable with the real flavor and body of a true extract.

An extract of lemon with five per cent. lemon oil requires at least 80 per cent. by weight of alcohol. This and the removal of the lemon oil from dilute alcohol by filtering through magnesia is shown by the fol-

lowing experiment.

In this experiment 5 cubic centimeters of lemon oil was made to 100 cubic centimeters by addition of alcohol of the various strengths given. Two grams of light carbonate of magnesia were then added and the mixture allowed to stand with occasional shaking for twenty-four hours. It was then filtered and the resultant clear solution tested with the following results.

No. of sample.	Per cent alcohol (by weight).	Change or	addition (of water.	Polarization 200 mm . tube-degs.*	Lemon oil by precipita- tion method, per cent.
12 34 5	8.5 13.0 17.3 21.5 26.2	44 44 44 44			0.0 0 0 0.0	0.0 0.0 0.0 0.0 0.0
6 7 8 9	80.9 85.7 40.5 45.4	Heavy clouding	line:s ness	on	0.3	0.0 Trace. Trace. 0.2
10	55.8	11 11	" "			0.4 0.8 1.7 2.9
14	78.9	66 66 66 66 66 66		••••••••	15.8 16.2 16.5 16.5	4.6 4.8 5.0 5.0

^{*5} per cent solution of oil used polarizes 16.5 degrees.

The amount of magnesia used appears to have no close relation to the amount of memory of the filteration; as a 5 per cent solution of lemon oil in 65 per cent alcohol (by weight) gave 2.81 per cent lemon oil after standing 24 hours and filtering with 1, 2, 3, 4, 5 and 10 grams of magnesia respectively.

Another sophistication that is sometimes practiced is the substitution of dilute alcoholic solutions of citral for the true lemon extract. Citral is an oily liquid obtained principally from the lemon grass. It has an odor somewhat resembling lemon but lacks the delicacy and fineness of aroma that characterizes pure lemon oil. It is course and heavy in flavor and extract manufacturers always direct that in the manufacture of imitation extracts it be employed in conjunction with the true lemon oil. But even when used in small proportions its presence is plainly discernible to a cultivated taste either in cooked or uncooked articles.

Coloring of Lemon Extracts—To cover up these frauds and make the sophisticated product appear like the genuine they are colored a golden yellow by the use of coal tar dyes. Occasionally turmeric tincture is used for this purpose. One of the coal tar dyes frequently used for coloring lemon extracts is classed by authorities as injurious to health. There is no excuse for the use of coal tar dyes or any other artificial coloring matters in lemon extracts. The lemon peel gives a beautiful yellow color that is all that can be desired. The use of the artificial dyes is simply for the purpose of deception.

Examination of Lemon Extracts for sale in Michigan—Since the organization of the Department much work has been done from time to time on the subject of vanilla extracts. During the present year I have had collected and sent to the laboratory samples of the principal brands of lemon extracts offered for sale in the grocery stores of the state. Altogether 88 samples have been received and the complete analyses of the

same will be found in Table II.

Of the 88 samples only 8 contained 5 per cent. or more of lemon oil and 4 of those were artificially colored, two with turmeric and two with yellow coal tar dye. 52 of the samples showed no lemon oil at all and 14 more had less than 1 per cent. 64 of the samples were colored with a yellow coal tar dye, 8 with turmeric and 2 with a foreign vegetable substance not identified. The amount of alcohol varied from 15.53 per cent to 82.75 per cent. by weight, the 11 samples having 5 per cent. or more of lemon oil having from 71.4 per cent. to 82.7 per cent. by weight of absolute alcohol.

TABLE II.—Analysis of "Lemon Extracts" sold in Michigan.

		·	Sugar present.	Sugar present. Glycerin present.	Sugar present.	Sugar present.	Glycerin present. Glycerin present.	Glyoeria present.
		Color.	Coal tar dye. Coal tar dye. No foreign. No foreign. Coal tar dye.	Coal tar dye. No foreign. Turmeric. Coal tar dye. Coal tar dye.	Coal tar dye. Coal tar dye. Coal tar dye. Coal tar dye. Coal tar dye.	Coal tar dye. Coal tar dye. Coal tar dye. Coal tar dye.	Coal tar dye. Coal tar dye. Coal tar dye. Coal tar dye. Coal tar dye.	Turmeric. Coal tar dye.
-ə.ıd	dex of	Refractive in	1.4601	1.4688		1.4694	1.4894	1.4694 1.4684 1.4688 1.4686
	y tation.	By weight, per cent.	00.00 00	Trace. 7.88 0.86 3.74 0.28	88888	0.00 F 0.00 0.87	99299	6 8 9 9 9 9 9 8 9 8 9 8 9 8 9 8 9 8 9 8
å oll.	By precipitation.	By volume, per cent.	99948 88848	Trace. 7.66. 8.70 0.30	98888	00.00 F 00.00 00.04.94 04.04	98888	885888
Lemon off	y scope.	By weight, per cent.	88888	775.06. 0.87. 0.28	88888	00008	88888	530000 535888
	By polariscope.	By volume, per cent.	98%38	Trace. 7.66 0.83 8.75 0.81	88888	9999	88888	838888
·uuu		Polarization ergeb—acgre	+++ 20.0 20.0 0.0	+++3.5 ++1.2.0 -1.0.0	0.000	00008	00000	### + 88.000 80.000 80.000
	•	Ash, per cent	880000	8.0000	88882	28228	85558	228228
	.au	Solids, per ce	0.00 0.00 0.16 0.10	0.08 8.00 0.00 0.00	90000	0.0000	85.000 812.95 E.B	88.89
Teq	velght,	cenr Vicopol dy	288888 26532	25.25 25.35 26.35 36.35 36.35 36.35	88.88.83 7.88.93 7.88.93	88845 83458	25.25.35 85.35.35 85 85.35 85 85 85 85 85 85 85 85 85 85 85 85 85	25.55.52 25.56.58 25.58 25.58 25.58 25.58
· (.50	lty (15.5	Specific grav	0.968 0.968 0.828 0.8403 0.9668	0.9269 0.8358 0.9096 0.9601 0.9182	0.9611 0.9683 0.9839 0.9406 0.9807	0.9602 0.9581 0.9091 0.9662 0.8696	0.9766 0.9757 0.9658 0.9649	0.8429 0.8587 0.9192 0.9707 0.8642 0.9689
biuf	orrje (i	Capacity of tounces).	2.1.4.4. 1.8.0.0.8.	0-400	00000	0.	8.49	-04040
		Labeled as	Extract of Lemon. Concentrated Extract of Lemon. Lemon Flavor. Concentrated Extract of Lemon. Concentrated Extract of Lemon.	Pure Extract Lemon True Flavoring Lemon Durble Favoring Extract of Lemon Double Extract Lemon Concentrated Extract of Lemon	Double Concentrated Extract Lemon Extract of Lemon	Extract of Lemon Extract of Lemon Standard Extract Lemon Highest Grade Lemon Extract Extract of Lemon	Extract of Lemon Standard Lemon Pure Extract Lemon Best Extract Lemon. Extract of Lemon.	Highly Concentrated Lemon Extract of Lemon Extract of Lemon Special Extract of Lemon Extract Lemon Extract Lemon Double Lemon Flavoring
	.Tedmu	Laboratory n	82382	2222	82382	88388	23333	£2223

Olyoerin present.	Bugar present.	Glycerin present.	Glycerin present.	Glyoerin present. Bugar present. Sugar present.	• .	Sugar present.	Sugar present.	Sugar present. Sugar present.	
Coal tar dye. Coal tar dye. Coal tar dye. No foreign.	Vegetable. Ooal tar dye. No foreign. Coal tar dye. No foreign.	Coal tar dye. Coal tar dye. Coal tar dye. Coal tar dye. Coal tar dye.	No foreign. No foreign. Turmerio. Coal tar dye. Coal tar dye.	Turmerio. Coal tar dye. No foreign. Coal tar dye. No foreign.	Coal tar dye. No foreign. Turmeric. Vegetable. No foreign.	Coal tar dye. Turmerio. Coal tar dye. Coal tar dye.	Coal tar dye. Coal tar dye. Turmeric. No foreign. Coal tar dye.	Coal tar dye. Coal tar dye. Coal tar dye. Coal tar dye.	-
1.400	1.4007		1.4607		1.466	1.4001	1.4661		
**************************************	8888	88888		0.00 1.000 1.000 1.000 1.000	88883	8288	58868	88888	
88888	90%0- 88388	98888	9000- 48888	0.00 FF 0.00 SF0 0.00 S	0.200.tb	88888	-04.80 88888	98888	
*0000 *00%	88489	88888	8888	88888	0.00.00	88848	10400 68258	88888	
20000 20000	88288	88888	88888	88888	0000 to 88683	0.00 18.00 18.00 18.00 18.00	1.04.80 86.00 87.00	88888	
+ 0.00 + 0.00 0.00 0.00	00000 4.0600	00000	+ 000000 00004	++ 2008 000 000	+ + 0.0 + 12.0 + 12.0 0.0 0.0	++5.0 +1.0 +1.0 +1.0 1.0	++++ 24.4.80 6 8 8 6 0 0	0.00 t 0.00 t 0.00 t 0.00 t	
00000 08288	2888 3888	88988	88888	00000 500000 5000000000000000000000000	98958	9.000 8.89 9.00 9.00	28888	82888	
2888	00001	00000 88888	00%00 18384	56828 86828	98788	2000 8000 8000 8000	98588	0.08	
	285.15 285.88	88.511 21.7388	38886 55823	88838 22588	48282 48286 88528	5.4.4.5.6. 8.8.4.8.8	23.53.53 2.53.53	5.58.28 5.58.53 5.58.53	
0.9723 0.9723 0.9228 0.9187 0.9886	0.9690 0.9609 0.9634 0.9618	0.9673 0.9671 0.9888 0.9819 0.9818	0.9680 0.9680 0.9641 0.8641	0.9566 0.9455 0.9818 0.9649	0.9546 0.9546 0.9689 0.8899 0.8899	0.9758 0.9317 0.9877 0.9206	0.8876 0.9349 0.8884 0.8846 0.9668	0.9710 0.9711 0.9731 0.9696 0.9600	
	40.000		-:6:5:0	8.49.91. 80.000	-01 by			88.5.8	
Extract of Lemon Extract of Lemon Flavoring Extract Lemon Barract of Lemon Extract of Lemon	Triple Extract Lemon Extract of Lemon Concentrated Extract of Lemon Flavoring Extract of Lemon Supreme Lemon	Strictly Pure Extract Lemon Extract Lemon Fure Extract Lemon Triple Extract Lemon Extract Lemon	Pure Extract Lemon Extract of Lemon Concentrated Extract of Lemon Extract of Lemon Concentrated Extract of Lemon	Extract of Lemon. True Extract of Lemon. Fure Extract of Lemon. Fure Extract of Lemon.	Lemon Extract of Lemon Extract of Lemon Special Extract of Lemon Extract of Lemon	Extract of Lemon. Extract of Lemon. Pure Concentrated Extract Lemon. Finest Extract Lemon. Fruit Extract Lemon	Double Strength Extract Lemon Extract of Lemon Highly Concentrated Lemon Extract of Lemon Double Strength Extract of Lemon.	Extract of Lemon. Lemon Compound. Extract of Lemon. Extract of Lemon. Extract of Lemon.	· Probably contains turpentine.
28 88 28 88	22823	28828	82888	998955 99895	8 58855	1138 1138 1151	117 118 120 120	23222	
							Digiti	zed by GC	ogle

TABLE II.—Analysis of "Lemon Extracts."—Concluded.

## Polarization 200 mm. Polarization 200 mm		By weight, per cent. By weight, per cent. By weight, cipitated of cipitated of	0.71 0.00 0.00 0.00 Coal tar dye. Sugar present. 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	0.66 0.46 0.42 1.4604 Coal tar dye. Glycerin present. 0.00 0.00 0.00 Coal tar dye. 0.00 0.00 0.00 Coal tar dye. 4.28 4.10 4.10 1.4700 Coal tar dye.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
### Capacity of bottle (fluid tract of Lemon	.894	tube-degre			
### Capacity of Dottle (fluid tract of Lemon Capacity of Dottle (fluid tract of Lemon Capacity of Dottle (fluid Capacity of Lemon Capacity (Labor). #### Capacity of Lemon Capacity (Labor). ###################################			85.82	8288	
Tact of Lemon Capacity of bottle (fluid femon Capacity of Lemon Capacity of bottle (fluid femon Capacity of Lemon Capacity of Capaci		Alcohol by	3828 3828 3738	\$2.55 \$1.88	55.55.55 56.55 56.55 56.55 56.55 56.55
Stract of Lemon smon tract of Lemon emon emon ract of Lemon emon tract of Lemon		ounces).	0000	0000	9000
		8	Pure Concentrated Extract of Lemon Extract of Lemon Extract of Lemon Triple Extract of Lemon	Double Strength Extract of Lemon. Compound Flavoring Extract Lemon Flavoring Extract Lemon. Flavoring Extract Lemon.	1111

Notes on Methods of Analysis—The methods of analysis used are practically those adopted as provisional methods by the Association of Official Agricultural Chemists.

For determining the lemon oil by volume from polariscope reading the factor 3.2 was used. Of seven samples of lemon oil obtained in original coppers, polariscope readings of from +14.0° to +18.8° for 5% alcoholic solution (in 200 mm. tube at 20° C.) were obtained; an average of +16.4° for the 7 samples. It was found necessary to read some samples at 25°C. instead of 20 degrees as extracts having from 50 per cent. to 70 per cent. of alcohol with 2 per cent. or so of lemon oil are too cloudy to read at the lower temperature. The sodium light was used in determining the refractive index by means of the Zeiss refractometer. With the sodium light a clear distinct line is obtained.

Valuable assistance has been obtained from paper on "Lemon Flavoring Extracts and Its Substitutes" by A. S. Mitchell, published in Journal American Chemical Society Vol. 21, page 1132; also from report on Lemon Extract by A. L. Winton and A. W. Ogden in Rept. Conn. Exp.

8ta. for 1901.

Lansing, October 31, 1902.

3

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1902.

Cases pending July 1, 1902. Cases commenced since said date. Cases nolle prossed.	38 18 2
CASES DISPOSED OF.	
Before Examining Magistrates: Defendants bound over to trial courts Defendants discharged on examination	9
In Trial Courts: Defendants convicted Defendants acquitted	15 0
Cases pending November 1, 1902	39

PROCEEDINGS HAD DURING THE MONTH OF OCTOBER.

Complaint was made October 9th in Justice Court of the city of Muskegon against Chas. W. Jennings, Prop. of the Jennings Flavoring Extract Co., Grand Rapids, Mich., charged with selling adulterated extract of lemon. Examination was held on the 31st inst. and defendant bound over to the November term of the Circuit Court for the county of Muskegon for trial.

Complaint was made Oct. 9th in Justice Court of the city of Muskegon against John DeBoe of the firm of DeBoe, King & Co., of Grand Rapids, Mich., charged with selling adulterated extract of lemon. On the 21st inst. defendant waived examination and was bound over to the November term of the Circuit Court for the county of Muskegon for trial.

In the case pending for sentence in the county of Ottawa, against Cornelius M. Phernambucq of Holland, charged with selling colored oleomargarine, on September 15th a fine of \$50 and \$20.80 cost was imposed by the court.

In the case pending in the Circuit Court for the county of Muskegon, against John H. Spoelman of Muskegon, charged with selling colored oleomargarine, defendant on September 30th entered a plea of guilty and a fine of \$75 was imposed by the court.

In the case pending for sentence in the county of Muskegon, against Daniel Christie of the city of Muskegon, charged with selling colored oleomargarine, on September 30th a fine of \$50 and \$25 cost was imposed by the court.

In the case pending in the Circuit Court for the county of Cass against Fred W. Pugsley of Dowagiac, charged with selling colored oleomargarine, defendant on October 13th entered a plea of guilty and a fine of \$50 was imposed by the court.

In the case pending in Police Court of the city of Grand Rapids against George N. Morse of the firm of The Morse Dry Goods Co., charged with selling colored oleomargarine, defendant on October 17th was bound over to the Superior Court of the city of Grand Rapids for trial.

In the case pending in the Police Court of the city of Grand Rapids against F. J. Dettenthaler of the Dettenthaler Market, charged with selling oleomargarine which was in imitation of yellow butter, defendant on October 17th was bound over to the Superior Court of the city of Grand Rapids for trial.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., October 31, 1802.

Hon. W. B. Snow, Dairy and Food Commissioner:

Sir—During the month of October, 41 samples of food products have been examined, 7 being pure and 34 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Chocolate Cooking Oil. Extracts Jelly Maple Syrup "Mixtures or Compounds" Mustard (Dry) Mustard (Prepared)	2 1 14 9 2 7 1	1 1 2 1 1	14 7 1 6 1
Oleomargarine Syrup Vegetable Butter Totals	1 1 41	1 . 7	34

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

CHOCOLATE.

No. K-355. Sample of "Justice Brand Chocolate," from J. E. Niles, Grand Ledge.

Sold by Musselman Grocer Co., Grand Rapids, Mich. Producer, Wm. H. Baker, Syracuse, N. Y.

Water	3.92	per	cent.
Ash	3.22	- "	66
Total starch	21.16	66	6.6
Total fat.			
Crude fiber			

Microscopic examination shows the presence of wheat starch.

EXTRACTS.

No. K.-347. Sample of "Zipp's 15c. Pure Vanilla," from Andrews, Wells & Co., Homer.

Sold by Berdan & Co., Toledo, Ohio.
Producer, The Zipp Manf'ng Co., Cleveland, Ohio.

Solids	14.04 per cent.
Ash	0.20 ~ "
Vanillin	0.066 " "
Coumarin	None.
Alcohol	
Sugar	
Color	Foreign.

Contains foreign coloring matter.

No. K-349. Sample of "Jennings' Double Concentrated Extract Lemon," from W. O. Cook & Son, South Haven.

Sold by Jennings' Flavoring Extract Co., Grand Rapids, Mich. Producer, Jennings' Flavoring Extract Co., Grand Rapids, Mich.

Specific gravity	0.95686. 0.07 per cent.
Alcohol, by weight	30.33 '' ''
Color, artificial	Yel low Coal Tar Dye

Not a pure extract of lemon.

No. K-350. Sample of "DeBoe's Double Concentrated Extr John J. Bither, Muskegon. Sold by DeBoe, King & Co., Grand Rapids, Mich. Producer, DeBoe, King & Co., Grand Rapids, Mich. Specific Gravity	0.92277 0.08 per cent.
Alcohol, by weight. Lemon oil	48.00 " " None. Yellow Coal Tar Dye.
No. K-351. Sample of ''Jennings' Double Concentrated Maniel Christie, Muskegon.	•
Sold by Jennings' Flavoring Ext. Co., Grand Rapi	-
Producer, Jennings' Flavoring Ext. Co., Grand Raj	pids, Mich.
Specific gravity	0.95647 0.06 per cent. 30.60 "" None.
Color, artificial Not a pure extract of lemon.	Yellow Coal Tar Dye.
No. K-352. Sample of "Simon Pure Extract Lemon," from	m C. Walkerson, Mus-
kegon. L Sold by Lemon & Wheeler Co., Grand Rapids, Mich	h
Producer, Thompson & Taylor Spice Co., Chicago,	
Specific gravity	0.96000
Solids	0.55 per cent.
Not a pure extract of lemon.	
No. K-353. Sample of "Jennings' Double Concentrated Ext Kampenga, Muskegon.	ract Lemon," from D.
Sold by Jennings & Smith, Grand Rapids, Mich.	
Producer, Jennings & Smith, Grand Rapids, Mich.	
Specific gravity Solids Alcohol, by weight Glycerine Lemon oil Color, artificial	59.52 " "
Not a pure extract of lemon.	
No. K-357. Sample of "Royal Blue Brand Flavoring Extrac Jeannot & Co., Muskegon.	et Lemon," from J. O.
Sold by W. J. Quan & Co., Chicago, Ill. Producer, W. J. Quan & Co., Chicago, Ill.	
Specific gravity Solids Alcohol, by weight. Sugar Lemon oil Color, artificial	0.94825 0.59 per cent. 36.00 " " 0.57 " " None. Yellow Coal Tar Dye
Not a pure extract of lemon.	T CHOM Onat I at 1010

No. K-358. Sample of "Atlas Triple Extract Lemon," from Muskegon.	J. O. Jeannot & Co.,
Sold by Reid, Murdock & Co., Chicago, Ill. Producer, Reid, Murdock & Co., Chicago, Ill.	
Specific gravity. Solids. Alcohol, by weight. Lemon oil Color artificial	40.30 " " None.
Not a pure extract of lemon.	
No. L-269. Sample "Pure Extract Lemon," from W. D. Bi Sold by W. F. Druck, Monroe, Wis.	rage, Luaington.
Producer, Quaker Medical Assn., St. Paul, Minn.	
Specific gravity. Solids Alcohol, by weight. Lemon oil Color, artificial	0.93935 0.11 per cent. 40.00 " " None. Yellow Coal Tar Dye.
Not a pure extract of lemon. No. L-270. Sample of "Pure Extract Vanilla," from W. D.	Bridge, Ludington.
Sold by W. F. Druck, Monroe, Wis.	
Producer, Quaker Medical Assn., St. Paul, Minn.	44.05
Solids. Ash Vanillin Coumarin Alcohol Sugar Color. Contains coumarin and foreign coloring matter.	0.28 " " " 0.082 " " " 29.70 " " "
No. R-165. Sample of "Big Value Extract of Lemon," from Bay City.	n Chas. A. Babo, West
Producer, Arctic Man'fg Co., Grand Rapids, Mich.	
Specific gravity Solids Oil. Alcohol, by weight Glycerin Color, artificial. Not a pure extract of lemon.	3.90 per cent. 2.00 " " 62.82 " " Present.
No. R-171. Sample of "W. Brand True Extract Vanilla," Cheap Store, Bay City.	from Walthers' Great
Producer, Phelps, Brace & Co., Detroit, Mich.	10.44
Solids. Ash. Vanillin Coumarin. Alcohol. Sugar. Color.	0.13 " " 0.036 " " None. 20.41 " " 9.47 " "
Contains foreign coloring matter.	r oreign.

No. R-177. Sample of "Imperial Concentrated Extract of Lemon," from the Stewart Mercantile Co., Saginaw, E. S.
Sold by The Stewart Mercantile Co., Saginaw, E. S., Mich.
Specific gravity 0.94745
Solids 0.63 per cent. Alcohol, by weight
Sugar
Lemon oil
Color, artificial Yellow Coal Tar Dye.
Not a pure extract of lemon. Label does not bear name and address of manufacturer.
No. R-178. Sample of "Imperial Concentrated Extract of Vanilla," from Stewart-Leesch Co., Saginaw, E. S.
Sold by The Stewart Mercantile Co., Saginaw, Mich.
Solids 8.31 per cent.
Ash 0.13 '' "
Vanillin 0.150 " "
Coumarin
Sugar
ColorForeign.
Contains foreign coloring matter. Label does not bear name and address of
manufacturer.
JELLY.
No. K-346. Sample of "High Grade Acme Raspberry Jelly," from Little & Powers, Galesburg. Sold by B. Desenberg & Co., Kalamazoo, Mich.
Producer, The J. Weller Co., Cincinnati, Ohio.
Water 25.48 per cent.
Ash
Reducing sugar
Polarization before inversion+111.4 degrees.
Polarization before inversion
Polarization before inversion+111.4 degrees.
Polarization before inversion

Not a pure strawberry jelly.

No. R-173. Sample of "Pure Fruit Jelly, Currant," from A. Applebee, Bay City. Producer, Reid, Murdock & Co., Chicago, Ill. 35.67 per cent. Water..... Ash..... 0.43 Reducing sugar 49.67 "
Polarization before inversion —9.0 degrees. Polarization after inversion20.2 Starch. Present.
Color. Artificial. Not a pure current jelly. No. U-45. Sample of "My Favorite Red Currant Jelly," from Jacob Smith, Marquette. Sold by **Farnham**, N. Y. Producer. **Farnham**. N. Y. 30.24 per cent. 0.69 " " Water Ash..... Reducing sugar 36.70 "
Polarization before inversion +89.0 degrees. Starch.... Present Color...... Artificial. Imitation fruit jelly artificially colored. No. U-50. Sample of "Manhattan Brand Fresh Fruit Jelly, Currant," from John Carlson, Marquette. Sold by Sprague, Warner & Co., Chicago, Ill. Producer, Sprague, Warner & Co., Chicago. Ill. Water 27.85 per cent.

 Water
 21.00 pcr

 Ash
 0.72 ""

 Reducing sugar
 57.14 "

 Polarization before inversion
 -14.8 degrees

 20.7 ""

 Starch Trace.
Color Fruit. Trace. Not a pure currant jelly. No. U-51. Sample of "Strawberry Jelly," from Frank Labority, Marquette. Sold by Kellar, Marquette, Mich. Water.... 33.75 per cent. 0.75 Ash..... Polarization before inversion......+113.0 degrees. Starch Present.
Color. Artificial. Imitation fruit jelly artificially colored. MAPLE SYRUP. No. L-271. Sample of "Pure Sap Maple Syrup," from N. A. Nelson, Traverse City. Sold by Musselman Grocery Co., Traverse City. Mich. 33.69 per cent.
 Ash
 0.12

 Reducing sugar
 4.55
 0.12 " Polarization before inversion.....+68.6 degrees. Not pure maple syrup.

"MIXTURES OR COMPOUNDS."

miatures or compounds.		
No. K-344. Sample of "Monarch Pure Maple Cream," from Lauster Bros., Ionia. Sold by Reid, Murdock & Co., Chicago, III.		
Producer, Reid, Murdock & Co., Chicago, Ill. Water Ash Reducing sugar before inversion. Reducing sugar after inversion Polarization before inversion. Polarization after inversion	+87.0 degrees.	
Sample is a mixture or compound and must be so labeled.		
No. L-266. Sample of "Strawberry Cream," from E. G. Ho Sold by S. Gumpert, New York, N. Y. Water	28.41 per cent. 17.18 " "	
Color (artificial)	Cochineal. Compound Ethers.	
No. L-267. Sample of "Lemon Cream," from E. G. Hopkins, Big Rapids. Sold by S. Gumpert, New York, N. Y.		
Water Magnesium carbonate	33.40 per cent. 18.08 " "	
Sugar	coal tar dye. lemon.	
No. L-268. Sample of "Orange Cream," from E. G. Hopkins, Big Rapids. Sold by S. Gumpert, New York, N. Y.		
Water	28.71 per cent. 16.39 " "	
Glucose Color (artificial). Flavor A mixture or compound and must be so labeled.	Coal Tar Dye. Orange.	
No. R-168. Sample of "Extract of Salyx," from Agent. Producer, California Fruit & Chem. Co., St. Louis, Mo.		
Solids	36.37 per cent. 0.03 " "	
Consists of a mixture of water, salicylic acid, and sugar. No. R-174. Sample of "Imperial Pie Fruits, Raspberry," f.	rom Young's Grocery	
Co., Bay City. Producer, H. C. Gutchess, Port Byron, N. Y.		
Water	11.66 per cent. 3.22 " "	
Starch		
Color	Coal Tar Dye.	

MUSTARD (Dry).

No. R-179. Sample of "Mustard," from Great Atlantic Saginaw, E. S.	and Pacific Tea Co.,	
Ash Wheat starch Mustard Turmeric.	5.00 per cent. 20.38 " "	
Contains wheat starch and turmeric.	•••••	
MUSTARD (Prepared).		
No. U-44. Sample of "Prepared Mustard," from A. Kangad	s, Marquette.	
Sold by Keelan, Marquette, Mich.		
SolidsAsh	20.79 per cent. 2.63 " "	
Vinegar		
Spices and turmeric.		
Not properly labeled.		
OLEOMARGARINE.		
No. R-170. Sample of "Oleomargarine," from Central UnCity.	nion Grocery Co., Bay	
Producer, Wm. J. Moxley, Chicago, Ill.		
Refractive Index at 25° C	1.4659 1.17	
Contains ingredients that cause it to look like yellow butter.	•	
No. R-176. Sample of "Oleomargarine," from George Desmarais, Bay City. Sold by Hammond, Standish & Co., Bay City, Mich. Producer, G. H. Hammond Co., Hammond, Ind. Refractive Index at 25°C		
SYRUP.		
No. U-49. Sample of "Old Fashioned Honey Syrup," Marquette.	' from J. F. Zerbeil,	
Sold by Gowan, Peyton, Twohy Co., Duluth, Minn.	•	
Water. Ash Reducing sugar. Polarization before inversion. Polarization after inversion. A glucose mixture.	0.98 ° ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	
Bracono mirentia.		

INSPECTIONS.

The following places were visited by the Department's inspection force

during the month of October:

Allegan, Ashley, Baldwin, Bay City, Brown City, Carsonville, Chassell, Colon, Detroit, Essexville, Fremont, Galesburg, Grand Ledge, Holland, Houghton, Hurontown, Ishpeming, Jamestown, Lake Linden, Lake Odessa, Ludington, Marquette, Mulliken, Negaunee, North Branch, Plainwell, Pori, Rollin, Ross, Saginaw, E. S., Salzburg, Schoolcraft, Scotville, Sebewaing, South Haven, South Range, Sumner, Tekonsha, Traverse City, Vicksburg, Wheatland, Woodstock.

DAIRY INSPECTIONS.

Report of dairies inspected during the month of October.

At Brown City:

- J. D. Erb—Number of cows, 16; condition, good; feed, pasture; stables good and clean; good ventilation; yard, dry and clean; water, well.
- W. McNellie—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Stimpson—Number of cows, 16; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; water, well.
- S. R. Whiting—Number of cows, 47; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- T. Harrison—Number of cows, 15; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- J. Young—Number of cows, 14; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- J. Marion—Number of cows. 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- J. Gunn—Number of cows, 16; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, well.

At Carsonville:

- M. J. O. Mera—Number of cows, 14; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, good and dry; water, well.
- J. Jones—Number of cows, 30; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- T. Johnson—Number of cows, 14; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fairly dry; water, well.
- J. DeWan—Number of cows, 10; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.
- J. Trieler—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- W. Smith—Number of cows, 9; condition, fair; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, dry and clean; water, well.
- W. Thompson—Number of cows, 14; condition, good; feed, pasture; stables, fairly good; fair ventilation; yard, fair; water, well.
- H. Rutel—Number of cows, 8; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.
- W. Graham—Number of cows, 12; condition, fair; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, well.
- J. Wright—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, well.

At Galesburg:

- J. W. Kaywood—Number of cows, 38; condition, good; feed, pasture and bran; stables, extra good and clean; ventilation, latest improvement; yard, dry and clean; water, well.
- W. A. Blake—Number of cows, 12; condition, good; feed, pasture and bran; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- L. Abbott—Number of cows, 11; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water well.
- C. Wayland—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- 8. McClarey—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry and clean; water, well.

At Jamestown:

- D. Branderhat—Number of cows, 8; condition, fair; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, spring.
- J. VanRhee—Number of cows, 7; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.
- P. Vanderslik—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, spring.
- P. Rynbrandt—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, well.
- B. TerHar—Number of cows, 7; condition, good; feed, pasture; stables, fair and clean; fair ventilation; yard, fair; water, well.
- J. Bowman—Number of cows, 5; condition, good; feed, pasture; stables, fairly good; fair ventilation; yard, fair; water, well.
- J. Schipper—Number of cows, 6; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.
- D. VanDeBunt—Number of cows, 8; condition, good; feed, pasture and corn; stables, good and clean; fair ventilation; yard, fair; water, spring.
- J. Lenhur—Number of cows, 11; condition, good; feed, pasture; stables, fairly good; fair, ventilation; yard, fair; water, well.
- N. Hawkes—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, dry and clean; water, spring.

At Lake Odessa:

- F. Rohlass—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- R. Galseur—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- L. Cook—Number of cows. 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- O. Cooley-Number of cows. 6; condition, good; feed, pasture; stables, fairly clean; fair ventilation; yard, fair; water, well.
- H. Shive—Number of cows. 5; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.
- F. Cooley—Number of cows, 5; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.

- B. Bliss—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fairly dry; water, well.
- W. Shellhorn—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fairly dry; water, well.

At Mulliken:

- W. Wilcox—Number of cows, 10; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fairly dry; water, well.
- C. Hilliker—Number of cows, 8; condition, good; feed, pasture; stables good and clean; good ventilation; yard, fair; water, well.
- H. Stern—Number of cows, 5; condition, good; feed, pasture; stables, good and clean; good ventilation; yard fair; water, well.
- G. D. Niles—Number of cows, 5; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- C. Randall—Number of cows, 6; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, well.
- C. Cryderman—Number of cows, 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- George E. Potter—Number of cows, 10; condition, good; feed, pastures; stables, good and clean; good ventilation; yard, fairly dry; water, well and spring.
- W. Brown—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- W. Hawes—Number of cows. 8; condition, good; feed, pasture; stables, good and clean; good ventilation; yard fair; water, well.
- J. Nichol—Number of cows, 10; condition, good; feed, pasture and meal; stables, good and clean; good ventilation; yard, fairly dry; water, well.
- O. Nichol—Number of cows. 7; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- H. Peabody—Number of cows, 10; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.

At North Branch:

- S. S. Lee—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, spring.
- W. Kruscheuski—Number of cows, 11; condition, good; feed, pasture; stables, fair and fairly clean; fair ventilation; yard, fair; water, spring.

- T. McGlosh—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, spring.
- D. Orr—Number of cows, 9; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, fair; water, well.
- I. Sweezey—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fairly clean; water, well.
- J. R. Dayton—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, well.
- H. Halsey—Number of cows, 5; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fairly clean; water, well.
- H. Avery—Number of cows, 8; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, well.

At Ross:

- J. E. Upjohn—Number of cows, 10; condition, good; feed, pasture and grain; stables, good and clean; good ventilation; yard, dry and clean; water, well and spring.
- W. E. Upjohn—Number of cows, 12; condition, good; feed, pasture and grain; stables, good and clean; good ventilation; yard, dry and clean; water, spring.

At Sebewaing:

- A. Anseger—Number of cows, 6; condition, fair; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, well.
- H. Getter—Number of cows, 12; condition, good; feed, pasture; stables, good and clean; good ventilation; yard, dry; water, well.
- H. Brady—Number of cows, 8; condition, good; feed, pasture; stables, good and fairly clean; fair ventilation; yard, dry; water, well.
- J. Mast—Number of cows, 6; condition, fair; feed, pasture; stable, good and clean; fair ventilation; yard, dry; water, well.
- H. Rupent—Number of cows, 6; condition, good; feed, pasture; stables, good and clean; fair ventilation; yard, fair; water, well.
- C. Faltz—Number of cows, 8; condition, good; feed, pasture; stables. good and clean; good ventilation; yard, fair; water, well.

CREAMERIES AND CHEESE FACTORIES VISITED IN OCTOBER.

Huron County.

Bad Axe Creamery, Bad Axe, Mich., W. Rapson, president; H. O'Dell secretary and treasurer; C. L. Myers, butter maker. Capacity of factory 15,000 lbs., receiving daily 12,000 lbs. The outfit comprises 1 No. 1 separator, 1-400 gal. receiving vat, 1-400 gal. cream vat, 10 H. P. engine, 15 H. P. boiler. Market, Philadelphia.

Sebewaing Creamery, Sebewaing, Mich., Wm. Wildman, president; J. Spriess, secretary; J. A. Spriess, butter maker. Capacity of factory 12,000 lbs., receiving daily 3,000 lbs. The outfit comprises 1 No. 1 separator, 1-500 gal. receiving vat, 1-400 gal. cream vat, 1-300 gal. churn, 1-20 bottle Babcock tester. Market, Philadelphia.

Kalamazoo County.

Climax Creamery, Climax, Mich., L. T. Clark, president; Frank Wilson, secretary and manager; A. Wilson, butter maker. Capacity of factory 15,000 lbs., receiving daily 9,000 lbs. Creamery and outfit in a fair sanitary condition, outfit consists of 2 No. 1 separators, 1-500 gal. receiving vat, 1-300 gal. cream vat, 1-300 gal. churn, 1-10 H. P. engine, 1-15 H. P. boiler, 20 bottle Babcock tester. Average test of milk 4.2%. Market, New York.

Highland Creamery, Oshtemo, Mich., R. C. Balch, president; S. W. Kendall, secretary; J. McKelvin, butter maker. Capacity of factory 12,000 lbs., receiving daily 5,000 lbs. Building and outfit in a very fine sanitary condition. The outfit consists of 1 No. 1 separator, 1 No. 3 separator, 1-300 gal. receiving vat, 2-150 gal. cream vats, 1-200 gal. churn, 1-20 bottle Babcock tester, 1-6 H. P. engine, 1-10 H. P. boiler. Market, Home and New York.

Riverside Creamery, Galesburg, Mich., F. O. Crossfield, president, butter maker and manager. Capacity of creamery 8,000 lbs., receiving daily 5,000 lbs. Building, fair; outfit, in a fine sanitary condition, and consists of 1 No. 1 separator, 1-250 gal. receiving vat, 1-300 gal. cream ripener, 1-375 gal. churn, 1-24 bottle Babcock tester, 1-10 H. P. engine, 1-15 H. P. boiler. Average test of milk 4.2%. Number of patrons, 95. Market, Home and Chicago.

Schoolcraft Creamery, Schoolcraft, Mich., Geo. Gilchrist, president; C. W. Krum, secretary; C. A. Duncan, treasurer; B. C. Straut, butter maker. Capacity of creamery 15,000 lbs., receiving daily 8,000 lbs. Building and outfit in a fine sanitary condition, outfit consists of 1 No. 1 separator, 1-450 gal. cream vat, 1-33 gal. churn, 1-32 bottle Babcock tester, 1-8 H. P. engine, 1-15 H. P. boiler. Number of patrons, 130. Average test of milk, 4.4%. Market, Philadelphia.

Vicksburg Creamery, Vicksburg, Mich., John Hamilton, president; O. O. Bishop, secretary; Fred Stafford, butter maker. Capacity of creamery 20,000 lbs., receiving daily 12,000 lbs. Building and outfit in first-class sanitary condition, outfit consists of 2 No. 1 separators, 1-500 gal. receiving vat, 1-300 gal. churn, 1 skim-milk weigher, 1-32 bottle Babcock tester, 1-12 H. P. engine, 1-40 H. P. boiler. Number of patrons, 150. Average test of milk 4.4%. Market, Philadelphia.

St. Clair County.

Yale Creamery, Yale, Mich., E. B. Fuller, president; O. Dennison, butter maker and manager. Capacity of creamery 15,000 lbs., receiving daily 12,000 lbs. Creamery is new and nicely arranged and is in fine sanitary condition. Outfit consists of 1 No. 1 separator, 1-300 gal. receiving vat, 1 cream vat, 1-375 gal. churn, 1-32 bottle Babcock tester, 10 H. P. engine, 25 H. P. boiler.

Sanilac County.

Maple Valley Creamery, Brown City, Mich., A. E. Piper & Co., proprietor; J. J. Refender, butter maker. Capacity of creamery 25,000 lbs., receiving daily 22,000 lbs. Creamery is in good sanitary condition, the outfit consisting of 2 No. 1 separators, 1-400 gal. receiving vats., 1-400 gal. cream vat, 1-300 cream vat, 1-600 gal. churn, 10 H. P. engine, 50 H. P. boiler. Market, Buffalo.

Tuscola County.

Caro Elgin Butter Co., Caro, Mich., A. N. Hatch, president; W. A. Mudge, secretary; W. H. Bechtel, butter maker and manager. Capacity of creamery 25,000 lbs., receiving daily 12,000 lbs. Condition, good and sanitary, outfit consists of 2 No. 1 separators, 1-500 gal. receiving vats, 2-250 gal. cream vats, 1-400 gal. churn, 8 H. P. engine, 1-12 H. P. boiler.

Unionville Creamery, Unionville, Mich., W. Brady, president; H. G. Spring, secretary; A. E. Clifferer, butter maker. Capacity of creamery 25,000 lbs., receiving daily 12,000 lbs. Creamery in a fine sanitary condition and outfit consists of 2 No. 1 separators, 1-400 gal. receiving vat, 1-300 cream vat, 1-375 gal. churn, 1-24 bottle Babcock tester, 1-12 H. P. engine, 1-20 H. P. boiler. Market, Philadelphia.

Van Buren County.

Glendale Creamery, Glendale, Mich., M. S. Sherred, secretary; T. Miller, butter maker and manager. Capacity of creamery 15,000 lbs., receiving daily 11,000 lbs. Building, machinery and utensils in a fine sanitary condition. The outfit consists of 2 No. 1 separators, 1-400 gal. receiving vat, 2-200 gal. cream vats, 1-400 gal. churn, 1-6 H. P. engine. 1-20 H. P. boiler, 1-20 bottle Babcock tester. Market, New York.

Berlamont Creamery, Berlamont, Mich., C. Lanton, proprietor, butter maker and manager. Capacity of creamery 10,000 lbs., receiving daily 4,000 lbs. Outfit consists of 1 No. 1 separator, 1-300 gal. receiving vat, 1-300 gal. cream vat, 1-200 gal. churn, 1-8 H. P. engine, 1-20 H. P. boiler, 1-24 bottle Babcock tester. Market, New York.

Base Line Cheese Factory, Bloomingdale, Mich., L. Reid, cheese maker and manager. Factory building, curing room and all machinery and utensils in a very unsanitary condition. Outfit consists of 1-500 gal. cheese vat, 1-15 H. P. boiler, 16 upright press, 1-20 bottle Babcock tester. Buys milk by Babcock test receiving daily 3,000 lbs. Makes Michigan Full Cream Cheese. Market, Home and Chicago.

Haven's Cheese Factory, Bloomingdale, Mich., E. A. Haven, proprietor and manager. Building and outfit clean and neat and in a fine sanitary condition, curing room large and clean, makes a high grade of Michigan cheese. Averages 4,000 lbs. of milk daily. Outfit consists of 2-500 gal. cheese vats, 1-12 H. P. engine, 1-15 H. P. boiler, 2 cheese presses, 1-20 bottle Babcock tester. Market, Home.

APIARY INSPECTIONS.

At Ashley City:

Wm. Wray—Number of colonies, 130; condition, healthy; flora clover basswood and fall flowers; honey house, neat; yard, fair.

Foul brood in his vicinity makes it difficult to keep his apiary healthy.

At Fremont:

Frank Huliers—Number of colonies, 1; condition, diseased; flora, basswood, clover and fall flowers; honey house, none; yard, neat. Bees and combs ordered destroyed.

George Clough—Number of colonies, 3; condition, two diseased, one healthy; flora, basswood, clover and fall flowers; honey house, none; yard, fair. Two colonies ordered destroyed.

Stillman E. Andrews—Number of colonies, 6; condition, all healthy except two; flora, basswood, clover and fall flowers; honey house, none; yard, neat and clean. Diseased colonies ordered destroyed.

Chas. Cadwell—Number of colonies, 25; condition, mostly good, a few diseased; flora, basswood, clover and fall flowers; honey house, fair; yard, very neat. Will treat diseased colonies in the spring.

Gus Graham—Number of colonies, 11; condition, good; flora, basswood, clover and fall flowers; honey house, none; yard, fair.

John Richardson—Number of colonies, 11; condition, excellent; flora, basswood, clover; yard, good.

W. E. Crane—Number of colonies, 15; condition, good; flora, basswood, clover and fall flowers; yard, fair.

Fayette Bradford—Number of colonies, 11; condition, excellent; flora, basswood, clover and fall flowers; yard, slovenly.

Winfield Reynolds—Number of colonies, 2; condition, excellent; flora, basswood, clover and fall flowers; yard, fair.

Wm. Trippensee—Number of colonies, 4; condition, excellent; flora, basswood, clover and fall flowers; yard, neat.

At Pittsford:

E. Goodrich—Number of colonies, 17; condition, excellent, found one diseased; flora, basswood and clover; yard, fair. Will treat diseased colony in the spring.

At Bollin:

- A. E. Knowles—Number of colonies, 20; condition, excellent; flora, basswood and clover; honey house, neat and clean; yard, neat and tidy.
- C. C. Fuller—Number of colonies, 6; condition, badly diseased; flora, basswood and clover; yard, neat and clean. Ordered bees and combs destroyed.
- G. D. Peebles—Number of colonies, 3; condition, badly diseased; flora. basswood and clover; yard, fair. Ordered bees, combs and hives destroyed.

Frank Bowen—Number of colonies, 1; condition, badly diseased; flora, basswood and clover; yard, fair. Ordered bees, combs and hives burned.

Albert Townsend—Number of colonies, 6; condition, excellent; flora, basswood and clover; yard, neat and clean.

C. W. Nichols—Number of colonies, 20; condition, excellent; free from disease; flora, basswood and clover; honey house, good; yard, neat and clean. Has had to treat all of his colonies the last year to keep them free from disease.

Orin Nicholoy—Number of colonies, 3; condition, two fair, one badly diseased; flora, basswood and clover; yard, neat. One colony so badly diseased it was ordered burned.

C. A. Huff—Number of colonies, 90; condition, excellent; flora, basswood and clover; honey house, good; yard, excellent. Has had 5 or 6 colonies; will treat them in the spring. Diseased colonies in his vicinity make it difficult to free his apiary.

At Sumner:

F. E. Hess—Number of colonies, 9; condition, some badly diseased; flora, basswood, clover and golden rod; yard, very neat. Diseased colonies will be treated in the spring.

Frank Tyrell—Number of colonies, 30; condition, excellent; flora, clover, basswood and goldenrod; yard, fair.

At Wheatland:

Thomas McSouth—Number of colonies, 30; condition, good, free from disease; flora, basswood and clover; yard, slovenly.

At Woodstock:

H. G. Strong—Number of colonies, 7; condition, excellent; flora, basswood and clover; yard, good. Kept his bees free from disease by having new combs built each year.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article. although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

- 1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;
- 2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;
- 3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;
 - 4. If it is in imitation of, or is sold under the name of another article:
- 5. If it consists wholly or in part of a diseased, decomposed, putrid. infected, tainted or rotten animal or vegetable substance or article whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poisonous

or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of

the manufacturer or compounder thereof;

They must contain nothing injurious to health;

- They must not be sold in imitation of, or under the name of another article:
- 4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound:
- A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address

of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled, "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour, in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the De-

partment on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter. CANDY.-Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health. CATSUP.—All packages containing same must bear the name and address of the

manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATES AND COCOAS.—If containing no other substances than cocoa mass

sugar and flavoring will not be classed as a compound or mixture.

Canned Goods.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica in size. The sale of peas or other vegetables greened with copper is prohibited.

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof,

even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

berry, pineapple, banana, etc., are prohibited by law.

FARINACEOUS GOODS.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear

the name and address of the manufacturer or compounder thereof.

HONEY.—Must be pure. Cannot be mixed with glucose or other substances and

sold as "Honey Compound."

JELLY.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

LARD.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

LIQUORS.—Spirituous, fermented, or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.

MAPLE SUGAR AND MAPLE STRUP.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple

Syrup Compound."

Milk.—Must contain not less than 3 per cent fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance deleterious to the quality of the milk, such as garbage, swill, or any sub-

stance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives to milk is prohibited.

MOLASSES.—Must be branded with its true and appropriate name and must be true to same. (See Syrup.)

OLEOMARGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica

in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANOAKE FLOURS.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

PEPPER.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTAED.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard" and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale,

or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them plain and prominent.

STRUPS.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture" and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half lnch in length and shall be in a conspicuous place. Glucose and glucose mixtures

shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package be labeled mixture or compound. (See paper.)

the package be labeled mixture or compound. (See pepper.)

Vinegar.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

LANSING MICHIGAN
ROBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS
1902

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

W. B. SNOW, -	-	-	•	-	-	-	-	COMMISSIONER
PERLEY C. HEALD,		-	-	-		-	DEPUTY	COMMISSIONER
R. E. DOOLITTLE.	_	_	_		_	_	- S	TATE ANALYST



LEMON EXTRACT.

The recent case of the People vs. Chas. W. Jennings, charged with selling an adulterated extract of lemon which came up for trial in the circuit court of the county of Muskegon on November 24, is deemed of too much importance to the general public to be passed with only the usual notice.

In this case, Mr. Jennings, an extract manufacturer, was charged with selling for extract of lemon, a product that contained no lemon oil and which was colored in imitation of true lemon extract. The testimony in the case showed that this so-called lemon extract was prepared by a process, the principles of which are in quite common use by manufacturers. It consists of mixing together lemon oil (and in this particular case also a small quantity of orange oil) alcohol and water and by thorough agitation and subsequent filtering through magnesia remove from the lemon oil portions of certain constituents that give to the resultant water-like solution a certain flavor of lemon. This is then colored a beautiful golden yellow with a yellow coal tar dye. It was shown further that the residual oil, which consists mostly of the terpene, was used in the manufacture of other extracts or sold to brokers in lemon oil at nearly one half the original cost of the oil.

The defense had an array of expert witnesses including Dr. Victor C. Vaughan, Dean of the Medical Department of the University of Michigan; Prof. Henry Kraemer, Professor of Pharmaceutical Chemistry of the State University of Wisconsin; C. E. Foote of Jackson, extract manufacturer and pharmaceutical chemist, and others. The states witnesses consisted of the State Analyst, R. E. Doolittle, and such other witnesses as was necessary to prove the sale. The attorneys for the defense were L. E. Knappen, of Grand Rapids and L. N. Keating of Muskegon; for the state, George S. Lovelace, Assistant Prosecuting Attorney for Muskegon county.

All the details of the case were thoroughly brought out, involving much technical testimony. The sale and analysis of the sample were not questioned but the defense maintained and endeavored to show by their expert witnesses that the so-called lemon extract made by their process was equal or superior to the true extract made from five per cent lemon oil with strong alcohol and lemon peel. The state claimed that a lemon extract must contain all the elements of five per cent lemon oil dissolved in strong alcohol and have no other coloring matter except that from the lemon peel.

The Court in its charge to the jury held that in the absence of any other statutory standard for flavoring extracts that the standard of the United States Pharmacopoeia is the one that is in force in this state in so far as it applies to food products. (See Extracts from Judge's Charge.) The jury brought in a verdict of guilty after a deliberation

of less than half an hour. A stay of sentence for sixty days was granted

pending an appeal to the Supreme Court.

The contentions of the department were upheld in every particular. In the future all lemon extracts must contain five per cent lemon oil in strong alcohol with no other coloring matter than that of the lemon peel. Lemon Extracts without color are salable. As noted in the October Bulletin, on and after January 1, 1903, all dealers must be prepared to meet these requirements. Reports have been circulated that the Department would not enforce these requirements pending the Supreme Court decision in the Jenning's case. This is not true and all dealers and others interested in the manufacture or sale of lemon extracts must prepare to meet the requirements by January 1, 1903 as before stated. The food law as sustained by decisions from our Supreme Court holds the person in whose possession the goods are found, responsible for their purity; and, although it has always been the policy of the Department to prosecute the manufacturer of adulterated products whenever possible, yet under no circumstances is the jobber or retailer relieved from any responsibility. Investigations made during the past year show that nearly all the manufacturers of lemon extracts have been selling in this state under certain brands, extracts that are adulterated. ports of many of these adulterated samples will be found in the Chemists's report of this and the October bulletins. These should be carefully looked over by all grocerymen and dealers in lemon extracts.

EXTRACTS FROM JUDGE'S CHARGE IN CASE PEOPLE VS. JENNINGS (CIRCUIT COURT, COUNTY OF MUSKEGON.)

In this case, gentlemen, the defendant is accused with having on the 28th day of May, 1902, at this city unlawfully sold or offered for sale lemon extract, in fact did sell some lemon extract to Daniel Christie, a dealer in this city; and it is the claim of the people that at the time of that sale the goods that were sold was not lemon extract, but was something else, and that the defendant here is guilty under the pure food law of selling something that was not true to name. And they have introduced evidence which they claim should satisfy you beyond all reasonable and fair doubt of the guilt of the defendant.

On the other hand it is the claim of the defendant that they are not guilty. You have heard the reasons that have been given by the defendants for saying that they are not guilty. They claim that this lemon extract which has been exhibited to you comes within the law and that

they are not guilty.

If you are satisfied from the evidence given here in the case that the defendant is guilty, and that beyond all reasonable and fair doubt this compound which has been claimed to be lemon extract is not in fact lemon extract under the pure food law, of course, it will be your duty to find the defendant guilty. If you have any reasonable or fair doubt on that proposition, of course, your verdict will be not guilty.

Now in this case we have a class of testimony that is not common or very common in this court; that is expert testimony. In other words,

we might claim it was boughten testimony. Not because the witnesses are corrupted I do not mean, but ordinarily when witnesses are produced on the stand we get information from them because of their knowledge; we have something that pertains directly to the case. These expert witnesses are witnesses that are hired to come here and give their testimony because of their great learning in connection with matters to which they testify. It refers to Dr. Vaughan and other parties that swore along that line. Of course, their testimony should be viewed by you and taken into consideration the same as testimony given by the other witnesses, and if you believe under all the circumstances that their statements are correct of course, you should give them such weight as under all the circumstances you think it is entitled to. * * * *

In 1895 the legislature of this State thought it wise to pass a law relative to the adulteration of food and food products. Perhaps there may have been some amendments since that time, but that was the foundation of the law. That law covers lemon extract as it covers all other products that are sold on the market. It seems at the time the law was passed and since that time there has not been—there is not incorporated within that law any specific formula for the manufacture of lemon extract. Now, we can hardly say, gentlemen, that at the time of the passage of that law that the legislature did not have some recognized and defined standard by which these essences or extracts should be governed or controlled. I think it would be hardly fair to the legislature to claim that there was not a standard they had in their mind at that time, and for the purposes of this case I will instruct you, gentlemen, that at that time and at this time this standard that appears here in the United States Pharmacopoeia is the standard recognized by the legislators of this state and the one to which—the one that is in force so far as it applies to the pure food law of this state with reference to that particular product.

And if this lemon extract here is manufactured in conflict with that formula, as I shall hereafter call your attention to it, and you should so find from the evidence, why it would be your duty to convict the defendant here.

By that formula it appears that it is necessary to have five per cent of lemon oil in the lemon extract and that lemon oil shall be cut by a sufficient quantity of alcohol to perform that act. Of course, you know what that means in common parlance, it should dissolve the oil. In addition to that, as the evidence tends to show in this case, after those things are put together, the fluid, whatever it might be, would be nearly the color of water. As coloring there may be or should be five per cent of lemon rind, and those ingredients when added together would be lemon extract, and that gentlemen, will be the standard as applied to the pure food law of this state.

Now, gentlemen, I do not mean by that statement that lemon extract cannot be manufactured by any other process except by that to which I have called your attention. I do not mean that. It is the claim of the defendant here that he has discovered a process by which he can manufacture lemon extract containing all of the qualities that lemon extract manufactured according to that formula would possess and not have entirely all of the ingredients in the first instance that are provided in the formula. And as I view this case, gentlemen, that is one of the important propositions in connection with this case—that and the ques-

Digitized by GOOGLE

tion of coloring—in the judgment of the court is the case, and that all of the testimony in the case here revolves itself about those two propositions.

It is the claim of the defendant, as I say, he has discovered a process by which he can produce in this lemon extract all of the qualities that would be produced by adding alcohol and lemon oil together, and that manufacturing it by that means he produces it chemically by taking a larger quantity of lemon oil and extracting certain parts of it. Now, gentlemen, if you find and are satisfied by the evidence in this case that after this lemon extract was manufactured as defendant here claims he did manufacture it, it possesses all of the qualities in strength and otherwise that it would possess if manufactured according to this formula, he is not guilty under this law. That is, he is not guilty of manufacturing an impure article, unless there are certain other articles that enter into the case to which I call your attention.

As I say, in the first instance, it is claimed that according to the formula it should be alcohol and five per cent of lemon oil. Now if he by some other process can manufacture from the lemon oil and alcohol a product that would contain all of the elements that these two elements would contain if so mixed, he would not be guilty so far and that would

be lemon extract except the color of it.

It is conceded here by all parties interested, I think, that the only object of the lemon peel is to produce coloring. But there is another element to which the prosecuting attorney has called your attention. The evidence tends to show, gentlemen, that if this product is produced as claimed here on the part of the defendant, that after production by his process, that the product would be nearly water white. As I say, if it contained all of the elements of lemon extract, I do not think he would be guilty under this law, and if you are so satisfied, of course, at that point it would be your duty to find a verdict of not guilty unless there is some other matter in which he has violated this law.

There is another provision of this pure food law that provides that ingredients shall not be colored. In this case it appears that after this fluid substance is produced which he claims is just the same as produced under this formula, that he desires to change it to a lemon color. In other words, he puts in an ingredient which he claims would produce

the same effect as this lemon rind.

What is the object, gentlemen, or what was the object of Mr. Jennings in adding this color. If the object was by any means to make it appear better or of greater value than it really is; if that was the object in adding that product, of course it is your duty without any question to find this defendant guilty, because he had not any right to add that kind of a product or any other kind of a product to this fluid which he had produced and sell it for lemon extract, because that is a direct violation of one of the provisions of this pure food law.

One of the objects of this law, that is the real object, was to provide that when any layman, whoever he might be, went into the market and purchased ingredients, that they were entitled to receive exactly what they bought. If they bought lemon extract, they were entitled to lemon extract. If they bought a compound, that compound should be labeled so they may know they were not getting lemon extract. In other words, the object of the law is to prevent a fraud upon the party who buys. That is one of the objects. Others are there might be things offered on the market that would be deleterious to health.

1

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1902.	
Cases pending July 1, 1902. Cases commenced since said date	38 26 2
CASES DISPOSED OF.	
Before Examining Magistrates: Defendants bound over to trial courts	9
In Trial Courts: Defendants convicted Defendants acquitted	27
Cases pending December 1, 1902	35

PROCEEDINGS HAD DURING THE MONTH OF NOVEMBER.

Complaint was made November 10 in Justice Court of the city of Saginaw against Carl A. Fiene, charged with selling adulterated mustard. On December 1, defendant entered a plea of guilty and a fine of \$50 was imposed by the court.

Complaint was made November 24 in Justice Court of the city of Saginaw, against E. W. Hinshaw, manager of Malcomson's Tea Store, charged with selling adulterated extract of vanilla. Examination was set for November 29 and on that date adjourned until December 8.

Complaint was made November 24 in Justice Court of the city of Saginaw against James Stewart (The Stewart Mercantile Co), charged with selling adulterated extract of lemon. Examination set for December 8.

Complaint was made November 24 in Justice Court of the city of saginaw against James Stewart (The Stewart Mercantile Co), charged with selling adulterated extract of vanilla. Examination set for December 8.

Complaint was made November 26 in Police Court of the city of Detroit against Oscar Ascher, charged with selling colored oleomargarine. Examination set for December 9.

Complaint was made November 26 in Police Court of the city of Detroit against Felix McWilliams and William A. Moore of the firm, McWilliams and Moore, charged with selling colored oleomargarine. Examination set for December 9.

Complaint was made November 26 in Police Court of the city of Detroit against Chas. Addison, charged with selling colored oleomargarine. Examination set for December 9.

Complaint was made November 26 in Police Court of the city of Detroit against C. H. Michell, charged with selling colored oleomargarine. Examination set for December 26.

In the case pending in the Circuit Court for the county of Emmet against The Colby, Hinkley Co., of Alanson, charged with selling colored oleomargarine, defendant on November 11 was found guilty. Sentence suspended.

In the case pending in the Recorders Court of the city of Detroit against Frank G. Lafer and John W. Lafer of the firm of Lafer Bros., charged with selling colored oleomargarine, defendants on November 11 entered a plea of guilty.

In the case pending in the Recorders Court of the city of Detroit against Chas. Addison, charged with selling colored oleomargarine de-

fendant on November 14 entered a plea of guilty.

In the case pending in the Recorders Court of the city of Detroit against Edward Raulo, charged with selling colored oleomargarine, defendant on November 14 entered a plea of guilty.

In the case pending in the Recorders Court of the city of Detroit against Francis T. Schmidt, charged with selling colored oleomargarine,

defendant on the 14th inst., entered a plea of guilty.

In the case pending for sentence in the Circuit Court for the county of Kalamazoo against John W. Phillips charged with selling colored oleomargarine, remanded to said court from the Supreme Court for sentence, court imposed a fine of \$50 and costs.

In the case pending in the Circuit Court for the county of Kalamazoo against Wm. G. VanKersen, charged with selling colored oleomargarine, defendant on November 17 entered a plea of guilty and a fine of \$50 was imposed by the court.

In the case pending in the Circuit Court for the county of Kalamazoo against Samuel Hoekstra charged with selling colored oleomargarine, defendant on November 17 entered a plea of guilty and a fine of \$50 was

imposed by the court.

In the case pending in the Circuit Court for the county of Kalamazoo against Thos. J. Sloan charged with selling colored oleomargarine, defendant on November 17 entered a plea of guilty and a fine of \$50 was imposed by the court.

In the case pending in the Circuit Court for the county of Muskegon against Chas. W. Jennings, charged with selling adulterated extract of lemon, on November 25 defendant was convicted and a stay of proceedings of sixty days granted pending an appeal to the Supreme Court.

In the case pending in the Circuit Court for the county of Muskegon against John DeBoe of DeBoe, King & Co., Grand Rapids, Mich.; charged with selling adulterated extract of lemon, on November 25, defendant entered a plea of guilty. A stay of proceedings of sixty days was granted pending the appeal of the Jennings case to the Supreme Court.

In the case pending in the Circuit Court for the county of Saginaw against A. D. Phillips charged with selling oleomargarine artificially colored. On December 2 defendant entered a plea of guilty and a fine

of \$50 was imposed by the court.

CHEMIST'S REPORT.

Department laboratory, Lansing, Mich., November 30, 1902.

Hon. W. B. Snow, Dairy and Food Commissioner:

Sir—During the month of November 81 samples of food products have been examined, 7 being pure and 74 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY. .

Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Cream of Tartar	_1		
Extracts (Flavoring)	28 1	1	21
Jelly "Mxtures or Compounds"	11	0	1
RUSCERU (LITY)	i		! !
Mustard (Prepared)	1 85	1 1	8
Pepper. Syrup.	1		
Totals	81	7	7

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

CREAM OF TARTAR.

No. K-373. Sample of cream of tartar from Southerton & Marsh, Battle Creek.

2101 12 0101 Dumple of crount of the thir from bounderson to Manie 11002.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
EXTRACTS. (Flavoring.)
No. K-359. Sample of "Coleman's Pure High Class Extract of Lemon" from M. A. Lasher, Plainwell.
Sold by Foote & Jenks, Jackson, Mich.
Producer, Foote & Jenks, Jackson, Mich.
Specific gravity 0.98404. Solids 2.15 per cent. Alcohol, by weight 43.46 " " Sugar 2.12 " " Lemon oil Trace Color, artificial Yellow Coal Tar Dye Not a pure extract of lemon.
No. K-360. Sample of "Concentrated Extract of Lemon" from Kolloff, Marty & Co., Allegan.
Sold by E. W. Gillett, Chicago, Ill.
Producer, Gillett's Chemical Works, Chicago, Ill.
Specific gravity 0.91541 Solids 0.33 per cent. Alcohol by weight 53.57 " " Sugar 0.32 " " Lemon oil Trace Color, artificial Yellow Coal Tar Dye Not a pure lemon extract.
No. K-361. Sample of "Biggest and Best Extract of Lemon" from J. G. Stien, Grocery Co., Allegan.
Sold by Atwood & Steele, Chicago, Ill.
Producer, Chicago Extract Co.
Specific gravity

DAIRY AND FOOD DEPARTMENT
No. K-362. Sample of "Biggest and Best Extract of Vanilla" from J. G. Stien Grocery Co., Allegan.
Sold by Atwood & Steele, Chicago, Ill.
Producer, Chicago Extract Co.
Solids
manufacturer.
No. K363. Sample of "Purity Concentrated Extract of Lemon," from Grange Store, Allegan.
Sold by E. W. Gillett, Chicago, Ill. Producer, Temple Mfg. Co., Chicago, Ill.
Specific gravity. 0.9876 Solids. 0.08 per cent. Alcohol, by weight. 57.64 " " Lemon oil. Trace Color artificial Yellow Coal Tar Dye.
Not a pure lemon extract.
No. K-364. Sample of "Oakland Brand Extract of Lemon," from Burrel Tripp, Allegan.
Sold by Phelps, Brace & Co., Detroit, Mich. Producer, Huron Mfg. Co., Detroit, Mich.
Specific gravity. 0.98241 Solids. 0.10 per cent. Alcohol, by weight. 11.15 " " Lemon oil None. Color, artificial. Yellow Coal Tar Dye.
Not a pure lemon extract.
No. K-366. Sample of "Concentrated Extract of Lemon," from B. Steketer, Holland.
Sold by E. W. Gillett, Chicago, Ill.
Producer, Gillett Chemical Works, Chicago, Ill.
Specific gravity 0.91330 Solids 0.13 per cent. Alcohol, by weight 53.88 " " Sugar Trace. Lemon oil Trace. Color, artificial Yellow Coal Tar Dye. Not a pure lemon extract.
No. K-368. Sample of "Gurney's Standard Lemon Extract," from Wm. Schoder,
Battle Creek. Sold by Puhl, Webb Co., Chicago, Ill.
Producer, Puhl, Webb Co., Chicago, Ill.
Specific Gravity. 0.97701 Solids. 2.52 per cent. Alcohol, by weight. 20.15 " " Glycerine. Present. Lemon oil. Trace. Not a pure lemon extract.

12	STATE OF MICHIGAN
No. K-376. Marshall.	Sample of "Gilt Edge Extract of Lemon," from Louis K. Cook,
Sold by Se	eley Mfg. Co., Detroit, Mich.
Producer.	A. B. Judson & Co., Detroit, Mich.
Specifi Solids. Alcoho Sugar. Lemon	e gravity. 0.97312 2.81 per cent. l, by weight 25.70 " " 2.65 " " oil None. brtificial Yellow Coal Tar Dye
Not a pure	lemon extract.
Sold by Se	Sample of "Rococo Extract of Lemon," from Louis K. Cook, Marshall eley Mfg. Co., Detroit, Mich. A. B. Judson Co., Detroit, Mich.
Specifi Solids Alcoho Sugar Lemon	2 gravity
Not a pure	lemon extract.
Producer, Specifi Solids	wood & Steele, Chicago, Ill. Atwood & Steele, Chicago, Ill. c gravity
Lemor Color,	oil
Not a pure	lemon extract.
No. K-380. Muskegon.	
	W. Gillett, Chicago, Ill. E. W. Glllett, Chicago, Ill.
Specif Solids Alcoho Lemon	c gravity 0.83320 0.11 per cent. l, by weight 84.10 " " oil 5.00 " " artificial Yellow Coal Tar Dye
Contains fo	reign coloring matter.
No. K–381. kegon.	Sample of "Standard Extract of Lemon," from John J. Bither, Mus-
	W. Gillett, Chicago Ill. Gillett's Chemical Works, Chicago, Ill.
Specifi Solids Alcoh Lemon Color,	0.91562 0.10 per cent.

DAIRY AND FOOD DEPARTMENT 13
No. R-180. Sample of "Imperial Concentrated Extract of Vanilla."
Sold by Stewart Mercantile Co., Saginaw, E. S., Mich.
Solids
manufacturer.
No. R-181. Sample of "Imperial Concentrated Extract of Lemon."
Sold by Stewart Mercantile Co., Saginaw, E. S., Mich.
Specific Gravity 0.94550 Solids. 0.44 per cent Alcohol, by weight. 36.10 " " Sugar. 0.42 " " Lemon Oil, None Color, artificial. Yellow Coal Tar Dye
Not a pure extract of lemon and label does not bear name and address of manufacturer.
No. R-184. Sample of "Double Strength Concentrated Extract of Vanilla," from Malcomson's Tea Store, Saginaw, E. S.
Producer, John M. Malcomson, Chicago, Ill.
Solids 11.57 per cent Ash 0.30 "" Vanillin 0.273 "" Coumarin None Alcohol by weight 19.84 "" Sugar 7.50 "" Color Foreign
Contains foreign coloring matter.
No. R-185. Sample of "Double Strength Concentrated Extract of Lemon," from Malcomson's Tea Store, Saginaw, E. S. Producer, John M. Malcomson, Chicage, III. Specific Gravity
Contains foreign coloring matter.
No. R-191. Sample of "A. & P. Vanilla," from Great Atlantic and Pacific Tea Co., Bay City.
Producer, The Great Atlantic and Pacific Tea Co., New York, N. Y.
Solids

Contains Coumarin.

No. R-192. Sample of "A. & P. Extract of Vanilla" from G cific Tea Co., Saginaw, E. S.	reat At	lant	ic and Pa
Producer, Great Atlantic and Pacific Tea Co., New	York,	N.	Y.
Solids. Ash. Vanillin. Coumarin. Alcohol, by weight. Glycerine. Color.	2.37 0.05 0.073 0.060 8.17 Prese Foreig	" " " nt.	cent.
An artificial preparation. No. R-194. Sample of "Concentrated Extract of Vanilla" for the Pay City.	rom Gr	and	Union Tea
Co., Bay City. Producer, Grand Union Tea Co., Brooklyn, N. Y.			
Solids. Ash. Vanillin Coumarin Alcohol, by weight Sugar. Color.	0.12 0.033 0.008	er c	ent.
Contains coumarin and foreign coloring matter.	rore		
Lemon oil	0.90756 0.06 1 52.20 0.80	per o	
No. R-196. Sample of "K Brand, True Extract of Vanilla' Bay City.	' from	Kel	lley & Co.,
Producer, Phelps, Brace & Co., Detroit, Mich.	11 72 -		
	0.08 0.035 None. 3.00	"	44 44 44
Contains foreign coloring matter.			
No. S-229. Sample of "Dieter's Double Vanilla Flavoring." Sold by Taylor & McLeisch, Detroit, Mich. Producer, The J. P. Dieter Co., Chicago, Ill. Solids	6.52 p 0.02 0.030 None. 11.20 p Forei	" er c	"
comming toterkit coloring manaci.			

No. S-256. Sample of "G. and B. Flavoring Extract of Vanilla," from A. Hund, Detroit.

Sold by Grones & Brehmer, Detroit, Mich.

Producer, The J. P. Dieter Co., Chicago, Ill.

Solids	11.64 per	cent.
Ash		46
Vanillin	0.066 ''	66
Coumarin	None.	
Alcohol by weight		66
Sugar		44
Color	Foreign.	

Contains foreign coloring matter.

No. S-258. Sample of "Hoschna's Extract Vanilla and Tonka," from John F. Hoschna, Detroit.

Producer, The J. P. Dieter Co., Chicago, Ill.

Solids	12.02 per	cent.
Ash	0.13 ~ "	66
Vanillin	0.192 ''	66
Coumarin		
Alcohol, by weight		"
Sugar		36
Color	Foreign	

Contains foreign coloring matter.

No. U-53. Sample of "Highly Concentrated Artificial Banana Extract," from Negaunee Cooperative Co., Negaunee.

Sold by VanDuzer Extract Co., New York.

Producer, VanDuzer Extract Co., New York.

Specific gravity	0.93198
Solids	0.01 per cent.
Compound ethers	
Dilute alcohol	
Artificial coloring matter	

An artificial preparation.

JELLY.

No. K-367. Sample of "Currant Pure Fruit Jelly," from Finlay & Templeton, Battle Creek.

Sold by Reid, Murdock & Co., Chicago, Ill.

Producer, Reid, Murdock & Co., Chicago, Ill.

Water	33.66 per cent.
Reducing sugar	45.44 " "
Polarization before inversion	+4.0 degrees.
Polarization after inversion	-21.3
Starch	
Color	Artificial.

Not a pure currant jelly.

10	STATE OF MICHIGAN	
No. K-3 Creek.	72. Sample of "Golden Sheaf Raspberry Jelly," fro	om P. S. Evans, Battle
Sold by	The Dow & Snell Co., Toledo, Ohio.	
•	r, The Dow & Snell Co., Toledo, Ohio.	
Wat	er	0.59 **
Red Pola	ucing sugarrization before inversion	39.86 " " }-108.2 degrees.
Star	rization after inversion	Present
Imitatio	n fruit jelly artificially colored.	
	74. Sample of "Red Currant Imitation fruit Jelly attle Creek.	,'' from Southerton &
Sold by	J. F. Halladay & Son, Battle Creek, Mich.	
Ash	ter	34.96 per cent. 0.56 " "
Pola	ucing sugar+	123.8 degrees.
	rization after inversion	
Imitatio	n fruit jelly artificially colored.	
No. K-3	75. Sample of "Currant Pure Fruit Jelly," from Lo	uis K. Cook, Marshall.
Sold by :	M. Wolff & Sons, Chicago, Ill.	
Produce	er, M. Wolff & Sons, Chicago, Ill.	
Ash	er	0.63 * " "
Pola	ucing Sugar	-86.4 degrees.
	ch Pr	Present. Artificial.
Imitatio	n fruit jelly artificially colored.	
No. K-3 Marshall.	79. Sample of "High Grade Acme Currant Jelly,	" from J. Wiseman,
Sold by	Brown, Davis & Warner, Jackson, Mich.	
Produce	or, The J. Weller Co., Cincinnati, Ohio.	
	ter	25.00 per cent. 0.54 ""
Red	ucing sugar	40.06 " "
Pola Pola	arization before inversion	⊢87.4 degrees. ⊢78.7 ''
	rch	Present. Artificial
	n fruit jelly artificially colored.	
No. R-18	86. Sample of "Strawberry Imitation Fruit Jelly," law, E. S.	from Hayden Grocery
Produce	r, Flaccus Bros., Wheeling, West Virginia.	
	er	24.66 per cent. 0.71 ""
Red	ucing sugar+	36.80 '' ''
Pola	rization after inversion \dots $+$	133.7
	or fruit jelly artificially colored.	Artificial.
		7

DAIRY AND FOOD DEPARTMENT	17
No. R-187. Sample of "Plum Imitation Fruit Jelly," from Hayden Groc Saginaw, E. S.	ery Co.,
Producer, Flaccus Bros., Wheeling, West Virginia.	
Water	nt.
Polarization before inversion	•
Imitation fruit jelly artificially colored.	
No. R-188. Sample of "Red Raspberry Imitation Fruit Jelly," from Grocery Co., Saginaw, E. S.	Hayden
Producer, Flaccus Bros., Wheeling, West Virginia.	
Water 23.65 per cei	ıt.
1011	. (. (
Polarization before inversion+131.6 degrees.	•
Polarization after inversion+126.1 "ColorArtificial.	
Imitation fruit jelly artificially colored.	
No. R-189. Sample of "Blackberry Imitation Fruit Jelly," from Hayden Co., Saginaw, E. S.	Grocery
Producer, Flaccus Bros., Wheeling, West Virginia.	
Water 24.64 per cer Ash 0.65 " " Reducing sugar before inversion 40.06 " " Polarization before inversion +128.4 degrees. Polarization after inversion +128.0 " "	6
Color	
Imitation fruit jelly artificially colored.	
No. U-54. Sample of "Currant Jelly," Scandinavian Co-operative Co., Ish Mich.	peming,
Producer, The West Virginia Preserving Co., Wheeling, West Vi	rginia.
Water	nt.
Λομ.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	66
Polarization before inversion	3.
StarchPresent.	
Color Artificial.	
An imitation fruit jelly artificially colored.	
No. U-55. Sample of "Grape Fresh Fruit Jelly," from Trimountain Stamountain.	ore, Tri-
Sold by Sprague, Warner & Co., Chicago, Ill.	
Producer, Sprague, Warner & Co., Chicago, Ill.	
Water	it.
Reducing sugar	6
Polarization before inversion—13.08 degrees	3.
Polarization after inversion—24.0 ** Starch	
Color Artificial.	

Not a pure grape jelly.

MIXTURES OR COMPOUNDS.

No. S-257. Sample of "Mexican Vanilla Oil," from Fred Sanders, Detroit.
Producer, Corrizo Extract Co., Albany, N. Y. Solids
Coloring matter
MUSTARD (Dry).
No. R-190. Sample of mustard from The Great Atlantic and Pacific Tea Co., Bay City.
Ash
MUSTARD (Prepared).
No. U-52. Sample of prepared mustard from Geo. Haupt, Negaunee.
Sold by The Steele-Wedeles Co., Chicago, 111. Solids
Ash
Package not properly labeled.
OLEOMARGARINE.
No. R-182. Sample of oleomargarine from Chas. Sulley, Saginaw, E. S.
Producer, Ohio Butterine Co., Cleveland, Ohio.
Refractive Index at 25° C. 1.4653 Reichert-Meissl Number. 0.69
Contains ingredients that cause it to look like yellow butter.
No. R-183. Sample of oleomargarine from Hayden Grocery Co., Saginaw, E. S. Producer, Armour Packing Co., Chicago, Ill.
Refractive Index at 25°C. 1.4659
Reichert-Meissl Number
Contains ingredients that cause it to look like yellow butter. No. S-230. Sample of oleomargarine from C. H. Kunze, Detroit. Sold by Hammond, Standish Co., Detroit, Mich.
Contains ingredients that cause it to look like yellow butter. No. S-230. Sample of oleomargarine from C. H. Kunze, Detroit.
Contains ingredients that cause it to look like yellow butter. No. S-230. Sample of oleomargarine from C. H. Kunze, Detroit. Sold by Hammond, Standish Co., Detroit, Mich. Producer, Nelson, Morris & Co., Chicago, Ill. Refractive Index at 25°C
Contains ingredients that cause it to look like yellow butter. No. S-230. Sample of oleomargarine from C. H. Kunze, Detroit. Sold by Hammond, Standish Co., Detroit, Mich. Producer, Nelson, Morris & Co., Chicago, Ill. Refractive Index at 25°C
Contains ingredients that cause it to look like yellow butter. No. S-230. Sample of oleomargarine from C. H. Kunze, Detroit. Sold by Hammond, Standish Co., Detroit, Mich. Producer, Nelson, Morris & Co., Chicago, Ill. Refractive Index at 25°C
Contains ingredients that cause it to look like yellow butter. No. S-230. Sample of oleomargarine from C. H. Kunze, Detroit. Sold by Hammond, Standish Co., Detroit, Mich. Producer, Nelson, Morris & Co., Chicago, Ill. Refractive Index at 25°C
Contains ingredients that cause it to look like yellow butter. No. S-230. Sample of oleomargarine from C. H. Kunze, Detroit. Sold by Hammond, Standish Co., Detroit, Mich. Producer, Nelson, Morris & Co., Chicago, Ill. Refractive Index at 25°C

No. S-232. Sample of oleomargarine from Robert Knighton & Son, I	Detroit.
Producer, Friedman & Co., Chicago, Ill.	
Refractive Index at 25°C	1.4649 1.63
Contains ingredients that cause it to look like yellow butter.	
No. S-233. Sample of oleomargarine from Chas. Addison, Detroit.	
Sold by Michigan Produce Co., Detroit, Mich.	
Producer, Capitol City Dairy Co., Columbus, Ohio.	1 4040
Refractive Index at 25°C	1.4640 1.18
Contains ingredients that cause it to look like yellow butter.	
No. S-234. Sample of oleomargarine from Chas. Addison, Detroit.	
Sold by Michigan Produce Co., Detroit, Mich.	
Producer, Geo. H. Hammond Co., Hammond, Ind.	
Refractive Index at 25°C	1.4659 0.47
Contains ingredients that cause it to look like yellow butter.	0.71
No. S-235. Sample of oleomargarine from S. A. Bush, Detroit.	
Producer, Swift & Co., Chicago, Ill.	
Refractive Index at 25°C	1.4659 0.24
Contains ingredients that cause it to look like yellow butter.	
No. S-236. Sample of oleomargarine from Robert Downie & Son, Det Producer, Friedman & Co., Chicago, Ill.	roit.
Refractive Index at 25° C	1.4659 0.69
Contains ingredients that cause it to look like yellow butter.	
No. S-237. Sample of oleomargarine from Jarvis Bros., Detroit.	
Sold by Michigan Produce Co., Detroit, Mich.	
Producer, Geo. H. Hammond Co., Hammond, Ind.	
Refractive Index at 25°C	1.4659
Contains ingredients that cause it to look like yellow butter.	0.47
No. S-238. Sample of oleomargarine from Hurst Grocery Co., Detroit	.
Producer, Moxley & Co., Chicago, Ill. Refractive Index at 25° C	1.4659
Reichert-Meissl Number	0.70
Contains ingredients that cause it to look like yellow butter.	
No. 8-239. Sample of oleomargarine from Peter Smith & Sons, Detro	it.
Sold by Michigan Produce Co., Detroit, Mich.	
Producer, Geo. H. Hammond Co., Hammond, Ind.	
Refractive Index at 25° C	1.4659 0.47
Contains ingredients that cause it to look like yellow butter.	

No. S-240. Sample of oleomargarine from C. H. Michell, Detroit. Producer, Moxley & Co., Chicago, Ill.	
Reichert-Meissl Number	1.4659 0.70
Contains ingredients that cause it to look like yellow butter.	
No. S-242. Sample of oleomargarine from King's Tea Store, Detroit.	
Producer, Swift & Co., Chicago, Ill. Refractive Index at 20° C	1.4646
Reichert-Meissl Number	
Contains ingredients that cause it to look like yellow butter.	
No. S-243. Sample of oleomargarine from Lafer Bros., Detroit.	
Producer, Swift & Co., Chicago., Ill.	
Refractive Index at 25° C	1.4659 0.24
Contains ingredients that cause it to look like yellow butter.	
No. S-244. Sample of oleomargarine from McWilliams & Moore, Det	roit
Sold by Michigan Produce Co., Detroit, Mich.	
Producer, Geo. H. Hammond Co., Hammond, Ind. Refractive Index at 25° C	1.4659
Reichert-Meisel Number	0.47
Contains ingredients that cause it to look like yellow butter.	
No. S-245. Sample of oleomargarine from Chas. Hilderschied, Detroi	t.
Producer, Ohio Butterine Co., Cincinnati, Ohio.	
Refractive Index at 25° C. Reichert-Meissl Number.	1.4646 0.46
Contains ingredients that cause it to look like yellow butter.	
No. S-246. Sample of oleomargarine from Imperial Tea Store, Detroi	t.
Producer, Moxley & Co., Chicago, Ill.	1 4045
Refractive Index at 25° C. Reichert-Meissl Number.	1.4645 1.59
Contains ingredients that cause it to look like yellow butter.	
No. S-247. Sample of oleomargarine from Casper Rinsey, Ann Arbor	•
Producer, Ohio Butterine Co., Cincinnati, Ohio.	1 4040
Refractive Index at 25° C	1.4646 1.53
Contains ingredients that cause it to look like yellow butter.	
No. S-248. Sample of oleomargarine from M. M. Seaboldt, Ann Arbo	r.
Sold by Michigan Produce Co., Detroit, Mich.	
Producer, Geo. H. Hammond Co., Hammond, Ind.	
Refractive Index at 25° C	1.4659 0.47
Reichert-Meissl Number	
No. S-249. Sample of oleomargarine from Bigalke & Reule, Ann Ari	or.
Producer, Friedman & Co., Chicago, Ill.	
Refractive Index at 25° C	.4647 . 1.91
Contains ingredients that cause it to look like yellow butter.	

No. S-250. Sample of eleomargarine from Overbeck & Klinger, Ann Producer, Friedman & Co., Chicago, Ill.	Arbor.
Refractive Index at 25° C.	1.4659
Reichert-Meissl Number	0.69
Contains ingredients that cause it to look like yellow butter.	
No. S-251. Sample of eleomargarine from People's Coffee Co., Detroit Producer, Swift & Co., Chicago, Ill.	G.
Refractive Index at 25° C. Reichert-Meissl Number Contains ingredients that cause it to look like yellow butter.	1.4646 1.43
No. S-252. Sample of oleomargarine from Anthony Schneider.	
Producer, Moxley & Co., Chicago, Ill.	
Refractive Index at 25° C	1.4642 1.59
Contains ingredients that cause it to look like yellow butter.	
No. S-253. Sample of oleomargarine from Love Bros., Detroit. Sold by Michigan Produce Co., Detroit, Mich.	
Producer, Geo. H. Hammond Co., Hammond, Ind.	
Refractive Index at 25° C	1.4659 0.47
Contains ingredients that cause it to look like yellow butter.	
No. S-254. Sample of oleomargarine from A. W. Levy, Detroit.	
Producer Moxley & Co., Chicago, Ill.	1 4050
Refractive Index at 25° C. Reichert-Meissl Number.	0.70
Contains ingredients that cause it to look like yellow butter.	
No. S-255. Sample of oleomargarine from A. Hund, Detroit. Producer, Friedman & Co., Chicago, Ill.	
	1 4050
Refractive Index at 25°C	
No. 8-259. Sample of eleomargarine from Fort Wayne Table Supply	Co., Detroit.
Refractive Index at 25°C	1.4659
Contains ingredients that cause it to look like yellow butter.	
No. 8-281. Sample of oleomargarine from Robert Downie & Son, De	etroit.
Producer, Friedman & Co., Chicago, Ill. Refractive Index at 25°C	1.4659
Reichert-Meisel Number	0.69
No. S-262. Sample of eleomargarine from H. A. Connelly, Detroit. Refractive Index at 25°C	1.4660 0.47
-	

PEPPER.

No. K-365. Sample of black pepper from E. B. Bailey, Allegan. Sold by Ed. J. Gillies, New York, N. Y. Producer, Ed. J. Gillies, New York, N. Y.

Total AshAsh insoluble in hydrochloric acid (sand)	7.88	per	cent.
Ash insoluble in hydrochloric acid (sand)	1.56	- 44	46
Starch	21.75		44
Volatile ether extract	0.88	"	46
Non-volatile ether extract	5.60	66	46
Crude fibre	20.09	**	84

Does not comply with the standard for black pepper.

SYRUP.

No. K-370. Sample of "Glucose Mixture Syrup," from Wm. Schoder, Battle Creek.

Sold by The Jackson Grocery Co., Jackson, Mich.

Producer, D. B. S. S. Co., Chicago, Ill.

WaterAsh	25.15	per	cent.
Ash	0.93	**	" "
Reducing sugar	40.60	"	66
Polarization before inversion	-127.4	deg	rees.
Reducing sugar. Polarization before inversion. Polarization after inversion.	-118.8	4	3

A glucose mixture, not properly labeled.

INSPECTIONS.

The following places were visited by the Department's inspection force during the month of October:

Addison, Alba, Ann Arbor, Atlantic Mine, Battle Creek, Bay City, Clinton, Detroit, Dowagiac, Flushing, Franklin Mine, Fremont, Grass Lake, Grayling, Hancock, Hudson, Joppa, Laird, Linden, Manchester, Marshall, Mason, Mayville, Morrice, Ontonagon, Parma, Pori, Rollin, Roscommon, Saginaw, E. S. Saginaw, W. S. Tecumseh, Tipton.

DAIRY INSPECTIONS.

Report of dairies inspected during the month of November.

At Grass Lake:

- F. Divelle—Number of cows, 125; condition, good; feed, pasture, bran and gluten; stables, extra good; ventilation, good; yard, dry and clean; water, well.
- C. Cassiday—Number of cows, 15; condition, good; feed, pasture, bran and gluten; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- L. E. Dwelle—Number of cows, 30; condition, good; feed, pasture, bran and gluten; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. B. Coe—Number of cows, 20; condition, good; feed, pasture, silage and bran; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. C. Dorr—Number of cows, 15; condition, good; feed, pasture, bran and middlings; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. Myer—Number of cows, 15; condition, good; feed, pasture, bran and middlings; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- M. G. Smith—Number of cows, 15; condition, good; feed, pasture, bran and middlings; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- E. Delton—Number of cows, 25; condition, good; feed, pasture, gluten, bran and middlings; stables, good; good ventilation; yard, dry and clean; water, well.
- W. K. Craft—Number of cows, 20; condition, good; feed, pasture, bran, middlings and gluten; stable, good and clean; fair ventilaton; yard, dry and clean; water, well.
- Mrs. M. Clark—Number of cows, 15; condition, good; feed, pasture, bran, middlings and gluten; stables, good and clean; good ventilation; yard, dry and clean; water, well.

At Mason:

- W. H. Moore—Number of cows, 18; condition, good; feed, pasture, bran and middlings; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- M. McCurdy—Number of cows, 17; condition, good; feed, pasture and sugar-beets; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- B. F. Griffin—Number of cows, 22; condition, good; feed, pasture and sugar-beets; stables, good and clean; fair ventilation; yard, fairly dry; water, well.

At Parma:

- G. B. King—Number of cows, 20; condition, good; feed, pasture, bran, ground corn and oats; stables, good and clean; good ventilation; yard. dry and clean; water, well.
- G. D. Eggleston—Number of cows, 18; condition, good; feed, pasture, silage, ground wheat and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- E. M. Foster—Number of cows, 19; condition, good; feed, pasture and corn; stables, extra good and clean; good ventilation; yard, dry and clean; water, well.
- E. Flewalling—Number of cows, 12; condition, good; feed, pasture and corn; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- S. Foster—Number of cows, 22; condition, good; feed, pasture, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- M. W. Clark—Number of cows, 22; condition, good; feed, pasture, silage and bran; stables, good; good ventilation; yard, dry and clean; water, well.
- J. A. Campbell—Number of cows, 11; condition, good; feed, pasture and corn; stables, good and clean; good ventilation; yard, dry and clean; fair drainage; water, well.
- C. Campbell—Number of cows, 11; condition, good; feed, pasture and corn; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- G. Hoeg—Number of cows, 14; condition, good; feed, pasture, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; water, well.
- C. Mackay—Number of cows, 12; condition, good; feed, pasture, corn and bran; stables, extra good and clean; good ventilation; yard, dry and clean; water, well.
- R. E. Scott—Number of cows, 10; condition, good; feed, pasture and corn; stables, good and fairly clean; fair ventilation; yard, dry and clean; water, well.

Housman Bros—Number of cows, 12; condition, good; feed, pasture and enslage; stables, good and clean, good ventilation; yard. dry and clean; water, well.

CREAMERIES AND CHEESE FACTORIES VISITED IN NOVEMBER Calhoun County.

Battle Creek Creamery, Battle Creek, Mich. Capacity of factory 30,000 lbs., receiving daily 12,000 lbs. The outfit comprises two No. 1 separators, one 200 gal. receiving vat, one 500 gal. receiving vat, one 300 gal. churn, one 24 Babcock tester, two pasteurizers, two power ice cream freezers, one refrigerating plant, large capacity, one 20 H. P. engine, one 50 H. P. boiler. Pasteurized milk retailed yearly 1,825,000 lbs. Pasteurized cream retailed yearly 483,000 lbs. Butter 75,000 lbs. Sanitary condition of building, good; sanitary condition of machinery and utensils, extra good.

Joppa Skimming Station, Joppa, Mich. Moon Bros., proprietors, J. Armstrong, manager. Outfit comprises one No. 1 separator, one 500 gal. receiving vat, one automatic skim milk weigher, one 18 H. P. engine, one 25 H. P. boiler. Number of patrons, 50; receiving daily 9,000 lbs. of milk; cream shipped to Battle Creek creamery. Sanitary condition of building good; of machinery, utensils, surroundings and drainage, good.

Marshall Creamery, J. Powell, president; P. Lockwood, secretary and treasurer. Capacity of creamery 30,000 lbs., receiving daily 12,000 lbs. Number of patrons 185, yearly output of butter, 175,000 lbs.; color, medium; salt, medium; sanitary condition of building and surroundings, good; of outfit, extra good. The outfit consists of two No. 1 separators, one 500 gal. receiving vat, two 200 gal. cream ripeners, one 375 gal. churn, one automatic skim milk weigher, one 24 Babcock tester, one 10 H. P. engine, one 16 H. P. boiler.

Albion Creamery, Wm. Boyd, president; C. A. Grove, butter maker. Capacity of creamery, 30,000 lbs., receiving daily, 9,000 lbs. Number of patrons, 188; yearly output of butter, 110,000 lbs.; color, low medium; salt, medium; market, New York. Sanitary condition of building and surroundings, good; of outfit, extra good. Outfit consists of two No. 1 separators, one 400 gal. receiving vat, two 200 gal. cream ripeners, one skim milk weigher, one 375 gal. churn, one 10 H. P. engine, one 18 H. P. boiler, one 36 Babcack tester.

Ingham County.

Leslie Creamery, Geo. Laberteaux, president; T. E. Fair, butter maker and manager. Capacity of creamery, 30,000 lbs., receiving daily 20,000 lbs. Number of patrons, 20S; yearly amount of butter, 130,000 lbs.; market, New York; color, medium; salt, medium; sanitary condition of building, outfit and surroundings, good. Outfit consists of two No. 1 separators, one 400 gal. receiving vat, one 300 gal. cream vat, one 300 gal. skim milk vat, one 500 gal. churn, one 24 Babcock tester, one 6 H. P. engine, one 12 H. P. boiler.

Jackson County.

Parma Creamery, S. Foster, president; G. J. Pulleur, butter maker. Capacity of creamery, 40,000 lbs.; receiving daily, 35,000 lbs; number of patrons, 325; yearly amount of butter, 287,500 lbs.; market, New York; color, medium; salt, medium; sanitary condition of building and surroundings, good; of outfit, extra good. Outfit comprises three No. 1 separators, one 600 gal. receiving vat, two 300 gal. cream ripeners, one

Twentieth Century milk heater, one skim milk weigher, one 500 gal. churn, one 24 Babcock tester, one 12 H. P. engine, one 20 H. P. boiler.

Grass Lake Creamery, T. Dwelle, president; J. M. Rehrer, butter maker. Capacity of creamery, 30,000 lbs.; receiving daily, 20,000 lbs.; number of patrons, 250; yearly amount of butter, 250,000 lbs.; market. Detroit; color, high; salt, medium, sanitary condition of building and surroundings, good; of outfit, extra good. Outfit comprises three separators, one 300 gal. receiving vat, two 300 gal. ripeners, one 500 gal. churn, one milk heater, one 36 Babcock tester, one 10 H. P. engine, one 25 H. P. boiler.

Lenawee County.

Birdsall Skimming Station, C. R. & E. Mott, proprietors; F. Clark, manager. Daily milk received, 5,000 lbs.; number of patrons, 64; ship cream to Tecumseh; sanitary condition of building, outfit and surroundings, good; drainage, good. Outfit comprises one No. 1 separator, one 200 gal. receiving vat, one 32 Babcock tester, one 10 H. P. boiler.

Holloway Skimming Station, C. R. & E. Mott, proprietors. Daily milk received, 7,000 lbs.; number of patrons, 78; ship cream to Tecumseh; sanitary condition of building, outfit and surroundings, good; drainage, good. Outfit comprises one No. 1 separator, one 200 gal. receiving vat,

one 32 Babcock tester, one 10 H. P. engine, one 10 H. P. boiler.

Tecumseh Creamery, C. R. & E. Mott, proprietors; E. Mott, butter maker. Capacity of creamery, 10,000 lbs.; receiving daily, 5,000 lbs., and 300 gal. cream from skimming stations; number of patrons, 100; yearly amount of butter, 350,000 lbs.; market, Toledo; color, high; salt, medium. Sanitary condition of building, outfit and surroundings, good; drainage, good. Outfit comprises one No. 1 separator, one 200 gal. receiving vat, two 300 gal. cream ripener; one 800 gal. churn, one 300 gal. churn, one 40 Babcock tester, one 12 H. P. engine, one 24 H. P. boiler.

Ridgeway Skimming Station, C. R. & E. Mott, proprietors. Daily milk received, 8,000 lbs.; number of patrons, 120; ship cream to Tecumseh; sanitary condition of building, outfit and surroundings, fairly good. Outfit comprises one separator, one 200 gal. receiving vat, one 32 Bab-

cock tester, one 10 H. P. boiler.

Clinton Skimming Station, C. R. & E. Mott, proprietors. Daily milk received, 5,000 lbs.; capacity, 12,000 lbs.; number of patrons, 65; ship cream to Tecumseh; sanitary condition of building, outfit and surroundings, good. Outfit comprises one No. 1 separator, one 200 gal. receiving vat, one 32 Babcock tester, one 8 H. P. boiler.

Washtenaw County.

Manchester Creamery, J. A. Lowery, president; J. A. Smith, butter maker. Capacity of creamery, 30,000 lbs.; receiving daily 14,000 lbs.; number of patrons, 262; yearly amount of butter, 175,000 lbs.; market, Boston; color, medium; salt, medium. Sanitary condition of building, outfit and surroundings, good; drainage, extra good. Outfit comprises three No. 1 separators, one 300 gal. receiving vat, one 300 gal. cream ripener, one 400 gal. churn, one 200 gal. cream vat, one 24 Babcock tester, one 10 H. P. engine, one 30 H. P. boiler.

Tipton Cheese Factory, W. A. Beebe & Son, proprietors; A. G. Preston, cheese maker. Daily milk receipts, 4,000 lbs.; number of patrons, 45; sanitary condition of building, outfit and surroundings, good; market, home; brand, Michigan Full Cream Cheese; yearly output of cheese,

100,000 lbs. Outfit comprises one 550 gal. cheese vat, one 300 gal. cheese vat, one 12 H. P. boiler.

Addison Cheese Factory, L. T. Smith, president; C. L. Davis, cheese maker. Daily milk receipts, 2,000 lbs.; number of patrons, 13; brand, Addison; yearly output of cheese, 50,000 lbs.; market, Ohio and Indiana; building, poor, sanitary condition, fair; sanitary condition of outfit, good; of surroundings, poor; drainage, poor; water, good. Outfit comprises one 500 gal. cheese vat, one 6 Babcock tester; one curd sink; one cheese press.

APIARY INSPECTIONS.

At Dowagiac:

James Heddon—Number of colonies, 173; condition, healthy and strong; flora, basswood, clover and fall flowers; honey house, neat and clean; yard, neat and orderly.

At Fremont:

Frank Huliers—Number of colonies, 1; condition, diseased; flora, basswood, clover and fall flowers; yard, neat.

Geo. Clough—Number of colonies, 3; condition, 2 diseased, 1 healthy; flora, basswood, clover and fall flowers; yard, fair.

Stillman E. Andrews—Number of colonies, 6; condition, 2 diseased, 4 healthy; flora, basswood, clover and fall flowers; yard, neat.

At Flushing:

Deroy Simpson—Number of colonies, 46; condition, excellent; flora, basswood and clover; yard, clean and tidy.

At Hudson

Geo. M. Whitbeck—Number of colonies, 80; condition, 15 diseased, remainder healthy; honey house, fair; yard, exceedingly neat and tidy; flora, basswood, clover and fall flowers.

At Lindon:

H. R. Vanwagner—Number of colonies, 10; condition, healthy; flora, basswood, clover and fall flowers; yard, neat.

At Mayville:

L. T. Bacon—Number of colonies, 60; condition, healthy; flora, basswood, clover and fall flowers; honey house, neat, yard, neat.

At Morrice:

John Beckwith—Number of colonies, 88; condition, excellent; flora, basswood, clover and fall flowers; honey house, neat and clean; yard, tidy and orderly.

At Rollin:

C. C. Fuller—Number of colonies, 3; condition, 2 diseased, 1 healthy; flora, basswood, clover and fall flowers; yard, slovenly.

Frank Bowen—Number of colonies, 1; condition, diseased; flora, basswood, clover and fall flowers; yard, slovenly.

Frank Knowles—Number of colonies, 10; condition, 7 healthy, three diseased; flora, basswood, clover and fall flowers; yard, fair.

- J. N. Harkness—Number of colonies, 4; condition, healthy; flora, basswood, clover and fall flowers; yard, tidy.
- C. O. Peebles—Number of colonies, 3; condition, badly diseased; flora, basswood, clover and sweet clover; yard, fair.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief syntais of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, tirm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

If any substance or substances have been mixed with it, so as to depreciate or injuriously affect its quality, strength or purity; interior or cheaper substance or substances have been substanced or in part for it; valuable or necessary constituent or ingredient has been part abstracted from it; initiation of, or is sold under the name of another article; wholly or in part of a diseased, decomposed, putrid, or rotten animal or vegetable substance or article.

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poisonous

or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;

2. They must contain nothing injurious to health;

3. They must not be sold in imitation of, or under the name of another article:

4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound;

5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar,

phosphate powder, etc., must be true to name.

Buckwheat Flour.—If labeled, "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health I labeled, "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the De-

partment on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter. CANDY.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

Catsur.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synthsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;

2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;

3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;

4. If it is in imitation of, or is sold under the name of another article;

5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poisonous

or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;

They must contain nothing injurious to health;

They must not be sold in imitation of, or under the name of another article:

4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound:

5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar,

phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled, "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter. CANDY.-Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health. Carsur.—All packages containing same must bear the name and address of the

manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.-If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound" together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATES AND COCOAS.—If containing no other substances than cocoa mass

sugar and flavoring will not be classed as a compound or mixture.

CANNED GOODS.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica in size. The sale of peas or other vegetables greened with copper is prohibited.

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or com-

pounded with any other article and sold under the name of any ingredient thereof,

even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper and will be considered an adulters-It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FARINACEOUS GOODS.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear

the name and address of the manufacturer or compounder thereof.

HONEY.—Must be pure. Cannot be mixed with glucose or other substances and

sold as "Honey Compound."

JELLY.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have

no other label of whatever name.

LARD.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquors.—Spirituous, fermented, or malt liquors must not contain drugs or polsons or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.

MAPLE SUGAR AND MAPLE SYRUP .- Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

MILK.—Must contain not less than 3 per cent fat and 121/2 per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives to milk is prohibited.

Melasses.—Must be branded with its true and appropriate name and must be

true to same. (See Syrup.)

OLEOMARGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica

in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANCARE FLOURS.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and

address of the manufacturer or compounder.

Perper.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard" and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

PROCESS BUTTER.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed

in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them

plain and prominent.

Symps.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture" and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures



shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though

the package be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

LANSING MICHIGAN

ROBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS
1908

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

W. B. SNOW, -	-	-,	-	-		-	- Commissioner
PERLEY C. HEALD,	-		-	-	-		DEPUTY COMMISSIONER
R. E. DOOLITTLE,	_	_	_	_		-	- STATE ANALYST

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1902.

Cases pending July 1, 1902 Cases commenced since said d Cases nolle prossed	ate.,	29 31 3
	CASES DISPOSED OF.	
Before Examining Magistrate Defendants bound over Defendants discharged of	es: to trial courts	23 0
		3 3 0
Cases pending January 1, 190	3	24

PROCEEDINGS HAD DURING THE MONTH OF DECEMBER.

Complaint was made November 26 in police court of the city of Detroit, against Edwin B. Robinson, charged with selling oleomargarine which was in imitation of yellow butter. Examination set for January 9.

Comp.aint was made December 20 in police court of the city of Bay City, against Max Smith, manager of the Detroit Tea Store of Bay City, charged with selling oleomargarine for butter. Examination set for December 29 and adjourned till January 15.

Complaint was made December 22 in police court of the city of Detroit, against the firm of Robert Downie & Son, charged with selling oleomargarine which was in imitation of yellow butter. Examination set for January 9.

Complaint was made December 22 in police court of the city of Detroit, againt the firm of Lafer Bros., charged with selling oleomargarine which was in imitation of yellow butter. Examination set for January 9.

Complaint was made December 22 in police court of the city of Detroit, against the firm of Love Bros., charged with selling oleomargarine which was in imitation of yellow butter. Examination set for January 9.

Complaint was made December 22 in police court of the city of Detroit, against Herman B. Cohn, charged with selling oleomargarine which was in imitation of yellow butter. Examination set for January 9.

In the case pending in the circuit court for the county of Kalkaska, against Harry Hurley, charged with selling colored oleomargarine, defendant, on November 10, entered a plea of guilty and a fine of \$50 was imposed by the court. Fine remitted.

In the case pending in the police court of the city of Detroit, against Chas. Addison, charged with selling colored oleomargarine, defendant, on December 9, waived examination and was bound over to the recorder's court of the city of Detroit for trial.

In the case pending in the police court of the city of Detroit, against Oscar Ascher, charged with selling colored oleomargarine, defendant, on December 9, waived examination and was bound over to the recorder's court of the city of Detroit for trial.

In the case pending in the police court of the city of Detroit, against the firm of McWilliams & Moore, charged with selling colored oleomargarine, defendants, on December 9, waived examination and were bound over to the recorder's court of the city of Detroit for trial.

In the case pending for sentence in the recorder's court of the city of Detroit, against Francis T. Schmidt, charged with selling colored electroity of December 9, a fine of \$50 was imposed. Fine remitted.

In two cases pending in the recorder's court of the city of Detroit, against the firm of Peter Smith & Sons, charged with selling colored oleomargarine, defendant entered a plea of guilty on December 9 and a fine of \$50 was imposed in each case. Fine remitted.

In the case pending for sentence in the recorder's court of the city of Detroit, against the firm of Lafer Bros., charged with selling colored oleomargarine, on December 9, a fine of \$50 was imposed. Fine remitted.

In the case pending for sentence, in the recorder's court of the city of Detroit, against Edward Raulo, charged with selling oleomargarine, on December 9, a fine of \$50 was imposed. Fine remitted.

In the case pending for sentence in the recorder's court of the city of Detroit, against Chas. Addison, charged with selling colored oleomargarine, on December 9, a fine of \$50 was imposed. Fine remitted.

In the case pending in the recorder's court, of the city of Detroit, against Francis T. Schmidt, charged with selling colored oleomargarine on December 9, defendant entered a plea of guilty and a fine of \$50 was imposed. Fine remitted.

In the case pending in the justice court of the city of Saginaw, against James Stewart (Steward Mercantile Co.), charged with selling adulterated extract of lemon, examination was held on December 15 and defendant was bound over to the circuit court for the county of Saginaw for trial.

In the case pending in the justice court of the city of Saginaw, against James Stewart (The Stewart Mercantile Co.), charged with selling adulterated extract of vanilla, examination was held on December 15 and defendant was bound over to the circuit court for the county of Saginaw for trial.

In the case pending in the justice court of the city of Saginaw, against E. W. Hinshaw, manager Malcomson's Tea Store, charged with selling adulterated extract of vanilla, examination was held December 15 and defendant was bound over to the circuit court for the county of Saginaw for trial.

In the case pending in the police court of the city of Saginaw, against John Doerr, charged with selling colored oleomargarine, defendant on December 16, entered a plea of guilty and a fine of \$50 was imposed by the court.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., December 31, 1902.

Hon. W. B. Snow, Dairy and Food Commissioner:

Sir—During the month of December, 16 samples of food products have been examined, 1 being pure and 15 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

• Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Butter	2 6	0	2
Extracts (Flavoring) Jelly Mustard (Dry) Oleomargarine	1 3	1 0	0 3
Totals	16	1	15

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

BUTTER.

No. R-204. Sample of butter from Detroit Tea Store, Bay City.
Producer, Wm. J. Moxley, Chicago, Ill.
Refractive index at 25° C. 1.4642 Reichert-Meissl Number 1.38 Sample is oleomargarine.
No. R-205. Sample of butter from Detroit Tea Store, Bay City.
Producer, Wm. J. Moxley, Chicago, Ill.
Refractive index at 25° C. 1.4642 Reichert-Meissl Number. 1.38 Sample is oleomargarine.
EXTRACTS. (Flavoring.)
No. K-384. Sample of "Concentrated Extract of Lemon" from A. Danforth & Son. St. Joseph.
Sold by Kidd, Dater & Price, Benton Harbor, Mich.
Specific gravity 0.96146. Solids 0.74 per cent. Alcohol, by weight 28.52 "" Sugar 0.68 "" Lemon oil None. Color, artificial Yellow Coal Tar Dye Not a pure lemon extract.
No. R-197. Sample of "Concentrated Extract of Vanilla" from Grand Union Tea Co., Bay City.
Producer, Grand Union Tea Co., Brooklyn, N. Y.
Solids. 7.28 per cent. Ash 0.12 " " Vanillin 0.028 " " Coumarin Trace. Alcohol by weight 30.17 " " Sugar 5.60 " " Color Foreign.

Contains foreign coloring matter and a trace of coumarin.

No. R-200. Sample of "Extract Lemon," "Monarch" brand, from Donsereaux & Co., Lansing.
Producer, Reid, Murdock & Co., Chicago, Ill.
Specific gravity 0.82441 Solids 0.17 per cent. Alcohol, by weight 75.73 " " Lemon oil 6.50 " " Color, artificial Yellow Coal Tar Dye. Contains artificial coloring matter.
No. R-201. Sample of "Pure Concentrated Extract of Lemon," from Donsereaux & Co., Lansing.
Producer, Seneca Chemical Co., Chicago, Ill.
Specific gravity 0.95667 Solids 0.03 per cent. Alcohol, by weight 30.52 " " Lemon oil None. Color, artificial Yellow Coal Tar Dye. Not a pure lemon extract.
1100 a pare tomon extraor.
No. R-203. Sample of "Seal Extract of Vanilla" from H. E. Turney, Lansing. Sold by Reid, Murdock & Co., Chicago, Ill. Broducer Konwood Brossewing Co., Chicago, Ill.
Producer, Kenwood Preserving Co., Chicago, Ill.
Solids 12.50 per cent. Ash 0.08 " " Vanillin 0.420 " " Coumarin None. Alcohol, by weight 13.83 " " Sugar 6.12 " " Color Foreign.
Not a true vanilla extract.
No. 8-266. Sample of 'Concentrated Extract of Vanilla" from F. J. Klein, Detroit.
Producer, Francis H. Leggett, New York, N. Y.
Solids
address of manufacturer.
JELLY.
No. K-382. Sample of "Currant Jelly" from Ankli and Duncan, St. Joseph.
Sold by Franklin, McVeagh & Co., Chicago, Ill.
Producer, Franklin, McVeagh & Co., Chicago, Ill.
Water 23.93 per cent. Ash 0.55 " " Reducing sugar 53.60 " " Polarization before inversion — 0.4 degrees. Polarization after inversion —20.0 " Starch Present Color Artificial.
Not a pure current jelly.

Not a pure currant jelly.

No. K-383. Sample of "Blossom's Strawberry" jelly from A. Danforth & Son, St. Joseph.
Sold by McNeil & Higgins Co., Chicago, Ill.
Producer, McNeil & Higgins Co., Chicago, Ill.
Water 44.95 per cent. Ash 0.24 " " Reducing sugar 50.07 " " Polarization before inversion —11.2 degrees. Polarization after inversion —16.9 " Color Artificial.
Not a pure strawberry jelly.
No. R-198. Sample of "Red Currant Imitation Fruit Jelly" from Glenn & Van-Dusen, Lansing.
Sold by Northrop, Robertson & Carrier, Lansing, Mich.
Producer, Flaccus Bros., Wheeling, West Virginia.
Water. 25.35 per cent. Ash. 0.51 " " Reducing sugar 39.60 " " Polarization before inversion +127.8 degrees. Polarization after inversion +126.5 " Color. Artificial.
An imitation fruit jelly artificially colored. Label does not bear name and address of manufacturer.
address of mandacturer.
No. R-202. Sample of "Imitation Current Jelly" from E. C. Murphy, Lansing.
Sold by Dwyer & Vhay, Detroit, Mich.
Producer, John Boyle & Co., Baltimore, Md.
Water 34.35 per cent. Ash 0.58 " " Reducing sugar 37.30 " " Polarization before inversion +114.4 degrees. Polarization after inversion +114.2 " Starch Present. Color Artificial.
Contains artificial coloring matter.
OLEOMARGARINE.
No. S-267. Sample of oleomargarine from Herman B. Cohn, Detroit.
Producer, W. J. Moxley & Co., Chicago, Ill.
Refractive Index at 25° C
No. U-56. Sample of oleomargarine from J. & Keitha, Calumet. Sold by Friedman & Co., Chicago, Ill. Refractive Index at 25° C
Reichert-Meissl Number
No. U-57. Sample of oleomargarine from F. Siller, Houghton. Sold by Friedman & Co., Chicago, Ill.
Refractive Index at 25° C

CHEESE FACTORIES.

[Registered since the publication of the May-June bulletin.]

Nan	æ.
Frank	Tranger,

Location.
Berrien County, Niles,

Postoffice address., Niles.

LENAWEE COUNTY.

Geo.		Horton,	Canandaigua, Fairfield.	Fruit l	Ridge.
4.4		66	Fruit Ridge,	66	6.6
66	"	• 6	Hudson Center,	4.6	"
6.6		44	Jasper,	4.6	"
6.		44	Sand Creek,	66	"
••		6.6	Seneca Center,	"	6.
	"	* 6	Weston.	"	"
P: T .	. B	ogert,	Adrian,	Adri a n,	R. R. No. 4.

CREAMERIES.

[Registered since the publication of the May-June bulletin.]

ALLEGAN COUNTY.

Name.
Allegan Creamery,
Allegan ('reamery,
Chicora Creamery Co.,
Hopkins Creamery Co.,
Monterey Creamery Co.,

Location.
Hamilton,
Allegan,
Chicora,
Hopkins Station,

Owner or manager.
H. J. Brouwers.
Chas. Kemmer.
Geo. A. Austin.
H. H. Stroud.

CALHOUN COUNTY.

Battle Creek Creamery Co., Joppa Creamery, Battle Creek,

J. E. Moon, Secy.

HURON COUNTY.

Bad Axe Creamery Co., Sebewaing Creamery Co., Bad Axe, Sebewaing, J. L. Myers, Mgr. Jacob Spriess.

INGHAM COUNTY.

Leslie Co-operative Cry. Co.,

Leslie,

T. E. Fair.

JACKSON COUNTY.

Lakeside Elgin Butter Co.,

Grass Lake,

F. Dwelle.

KALAMAZOO COUNTY.

Riverside Creamery, City Creamery, Galesburg, Kalamazoo, F. O. Crossfield. C. H. Barbour.

LAPEER COUNTY.

Peoples' Creamery, Maple Valley Creamery Co.. North Branch, Burnside, Thomas Stacey. A. E. Piper.

LENAWEE COUNTY.

Birdsall Skimming Sta., Maple City Creamery, Clinton Creamery, Holloway Creamery, Ridgeway Creamery, Birdsall, Adrian, Tecumseh, E. Mott. J. W. Cline. Edward Mott.

OTTAWA COUNTY.

Jamestown Creamery Co.,

Forest Grove, R. R. No. 3,

Hiram Van DeBunte.

SANILAC COUNTY.

Applegate Creamery Co., Sanilac Center Creamery, Maple Valley Creamery Co., Applegate, Sanilac Center, Melvin, W.T. Leonard & Co.
A. E. Piper.

ST. CLAIR COUNTY.

Yale Creamery,

Yale,

E. B. Fuller.

TUSCOLA COUNTY.

Unionville Creamery,

Unionville,

H. G. Spring, Secy.

VAN BUREN COUNTY.

Berlamont Creamery, Glendale Co-operative Cry. Co. Berlamont, Glendale, Chas. Linton. M. J. Shered.

WASHTENAW COUNTY.

Manchester Creamery Co.,

Manchester,

J. A. Lowery.

INSPECTIONS.

The following places were visited by the Department's inspection force

during the month of December:

Adrian, Allegan, Alma, Battle Creek, Benton Harbor, Bradley, Brant. Cadillac, Cadmus, Calumet, Canandaigua, Centreville, Chassell, Chicora, Clayton, Detroit, Dorr, Fairfield, Freeport, Fremont, Fruit Ridge, Hamilton, Hancock, Hickory Corners, Hilliards, Holland, Hopkins Station, Houghton, Hudson, Jackson, Jasper, Lake Odessa, Lansing, Laurium, Madison, Martin, Medina, Mendon, Middleville, Moline, Monterey, Nashville, North Lansing, Otsego, Palmyra, Rollin, Sand Creek, Seneca Centre, Shelby, St. Joseph, Thompsonville, Three Oaks, Three Rivers, Traverse City, Walton, Wayland, Weston, Wolf Creek, Woodland.

DAIRY INSPECTIONS.

Report of dairies inspected during the month of December.

At Adrian:

J. W. Helme—Number of cows, 11; condition, extra good; feed, corn, silage, cottonseed meal, bran and clover hay; stables, extra good and clean; fair ventilation; water, city.

At Battle Creek:

- W. J. Foster—Number of cows, 16; condition, good and clean; feed, hay, silage, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- G. R. Peet—Number of cows, 20; condition, good; feed, hay, stover, ground corn, oats and bran; stables, good and clean; good ventilation; vard, dry and clean; good drainage; water, well.
- A. Rimes—Number of cows, 10; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- A. M. Mintey—Number of cows, 18; condition, good; feed, hay, silage, ground corn, oats and bran: stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

Ed. Andrews—Number of cows, 10; condition, good; feed, hay, silage, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

Dale Fuller—Number of cows, 12; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.

- F. B. Garrett—Number of cows, 10; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and fairly clean; fair drainage; water, well.
- G. C. Hicks & Son—Number of cows, 20; condition, good; feed, hay, stover, ensilage, bran, ground corn and oats; stables, good and clean with good ventilation; yard, dry and clean; good drainage; water, well.
- R. Pool—Number of cows, 6; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and fairly clean; good drainage; water, well.
- S. E. Woodworth— Number of cows, 18; condition, good and clean; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; good ventilation; yard dry and clean; good drainage; water, spring.
- J. M. Willison—Number of cows, 21; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, fair, but clean; fair ventilation; yard, dry and fairly clean; good drainage; water, well.
- II. Hamlin—Number of cows, 12; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and fairly clean; good ventilation; yard, dry and clean; fair drainage; water, well.
- W. T. Sackrider--Number of cows, 32; condition, good; feed, hay ensilage, bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- G. A. Crout—Number of cows, 20; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and fairly clean; fair drainage; water, well.
- M. Austin—Number of cows, 12; condition, good; feed, hay, stover, ground corn, oats and bran; stables, good and clean, good ventilation; yard, dry and clean; good drainage; water, well.
- W. D. Wyman—Number of cows, 11; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; fair ventilation; yard, fairly dry and clean; good drainage; water, well.

Isaac Willis—Number of cows, 27; condition, good; feed, hay, ensilage, ground corn, oats and bran; stables, fair, but clean; fair ventilation; yard, dry and clean; fair drainage; water, well.

C. G. Convis—Number of cows, 17; condition, good; feed, hay, stover, corn and bran; stables, fair and fairly clean; fair ventilation; yard, dry and fairly clean; fair drainage; water, well.

Schmidt Bros.—Number of cows, 22; condition, good; feed, hay, stover, ground corn, oats and bran; stables, good and clean; good ventilation; yard dry and clean; good drainage; water, well.

- W. W. Sprague—Number of cows, 26; condition, [good and clean; feed, hay, ensilage, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- H. Day—Number of cows, 18; condition, good and clean; feed, hay, stover, cornmeal and bran; stables, good and clean; fair ventililation; yard, dry and clean; good drainage; water, well.
- E. Sanford—Number of cows, 27; condition, extra good and clean; feed, hay, ensilage, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- Austin N. Reed—Number of cows, 25; condition, good and clean; feed, hay, ensilage, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- D. Eccles—Number of cows, 18; condition, good and clean; feed, hay, ensilage, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- C. Eyre—Number of cows, 8; condition, good; feed, hay, stover, ground corn, oats and bran; stables, good and fairly clean; good ventilation; yard, dry and clean; fair drainage; water, well.
- C. Hutchinson—Number of cows, 15; condition, good and clean; feed, hay, stover, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- L. Newbre—Number of cows, 14; condition, good; feed, hay, stover, ground corn. oats and bran; stables, good and clean; good ventilation; yard, dry and clean; fair drainage; water, well.
- F. A. Fuller—Number of cows, 12; condition, good and clean; feed, hay, ensilage, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- E. D. Andrews—Number of cows, 10; condition, good; feed, hay, ensilage, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- A. M. Minty—Number of cows, 18; condition, good and clean; feed, hay, ensilage, ground corn, oats and bran; stables, extra good and clean; good ventilation; yard, dry and clean; good drainage; water, well.



- A. Rimes—Number of cows, 10; condition, good; feed, hay, stover, ground corn, oats and bran; stables, good and clean; good ventilation; yard, dry and clean; fair drainage; water, well.
- J. Weaver—Number of cows, 16; condition, good; feed, hay, stover, ground corn and oats; stables, extra good and clean; good ventilation; yard, dry and clean; good drainage; water well.
- B. J. Morgan—Number of cows, 50; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; fair ventilation; yard, fairly dry and clean; fair drainage; water, well.
- W. H. Barber—Number of cows, 30; condition, good; feed, hay, stover, ground corn, oats and bran; stables, good and clean; fair ventilation; yard, dry and fairly clean; water, well.
- Geo. R. Peete—Number of cows, 20; condition, good and clean: feed, hay, ensilage, ground corn, oats and bran; stable, good and clean: good ventilation; yard, dry and clean; good drainage; water, well.
- A. Lapham—Number of cows, 8; condition good; feed, hay, stover; bran, ground corn and oats; stables, good and fairly clean; fair ventilation; yard dry and clean; good drainage; water, well.
- R. Gill—Number of cows, 20; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and clean; good drainage; water, well.
- G. W. Count—Number of cows, 15; condition, good; feed, hay, stover, ground corn and oats; stables good and clean; fair ventilation; vard, dry and fairly clean; fair drainage, water well.
- E. Gleason—Number of cows, 10; condition, good; feed, hay, stover, bran, ground corn and oats; stables, fair and fairly clean; fair ventilation; yard, dry; fair draiuage; water, spring.
- C. Webster—Number of cows, 8; condition, good; feed, hay, stover. bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- E. Hudson—Number of cows, 12; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; fair drainage; water, well.
- J. Ulrich—Number of cows, 10; condition, good; feed, hay, stover. bran, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and fairly clean; good drainage; water, well.
- C. H. Hussey—Number of cows, 9; condition, good; feed, hay stover, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and fairly clean; fair drainage; water, well.

- F. W. Miller—Number of cows, 18; condition, good; feed, hay, stover, bran, ground corn and oats; stables, fairly good and clean; fair ventilation; yard, dry and clean; good drainage; water, well.
- J. A. Johnson—Number of cows, 14; condition, good; feed, hay, ensilage, ground corn and oats; stables, good and fairly clean; fair ventilation; yard, dry and clean; good drainage; water, well.
- R. B. Cowles—Number of cows, 22; condition, good; feed, hay, ensilage, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage, water, well.
- E. Cowles—Number of cows, 14; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- W. G. Simmonds—Number of cows, 8; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, fairly good and clean; fair ventilation; yard, dry and clean; good drainage; water, well.
- J. Watkins—Number of cows, 18; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- J. R. Raymon—Number of cows, 9; condition, good; feed, hay, stover, ground corn and oats; stables, fairly good and clean; fair ventilation; yard, dry and clean; good drainage; water, well.
- C. M. Smith—Number of cows, 20; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; good ventilation: yard, dry and clean; good drainage; water, well.
- F. A. Finley—Number of cows, 12; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- G. W. Betterly—Number of cows, 12; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, fair but clean; fair ventilation; yard, dry and clean; good drainage; water, well.
- J. Flagg—Number of cows, 8; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and fairly clean; good drainage; water, well.
- J. Redford—Number of cows, 8; condition, good; feed, hay, stover, bran, ground corn and oats; stables, fairly good and clean; fair ventilation; yard, dry and clean; good drainage; water, well.
- J. P. Reasoner—Number of cows, 18; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and fairly clean; fair ventilation; yard, dry and clean; good drainage; water, well.

- J. M. Self—Number of cows, 32; condition, good; feed, hay, ensilage, stover, bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, spring.
- J. W. Rolfe—Number of cows, 18; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- B. W. Adams—Number of cows, 10; condition, good; feed, hay, ensilage, stover, bran, ground corn and oats; stables, good and fairly, clean; good ventilation; yard, dry and clean; water, well.
- E. Evans—Number of cows, 15; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, fairly good and clean; good ventilation; yard, dry and clean; good drainage; water, well.
- Joslin & Davis—Number of cows, 10; condition, good; feed, hav, stover, ground corn and oats; stables, fairly good and clean; good ventilation; yard, dry; good drainage; water, well.
- M. Young—Number of cows, 27; condition, good; feed, hay, ensilage, stover, bran, ground corn and oats; stables, good and clean; fair ventilation; yard dry and fairly clean; good drainage; water, well.
- H. Haskins—Number of cows, 10: condition, good; feed hay, ensilage, bran, ground corn and oats; stables, good and clean; fair ventilation; yard, dry and clean; good drainage; water, well.

INSPECTION, OF CREAMERIES AND CHEESE FACTORIES.

Allegan County.

Allegan Creamery, Allegan, Mich. H. F. Thomas, manager. Yearly receipts of milk, 3,000,000 lbs. Outfit consists of one No. 1 separator, one 500 gal. milk vat, one 400 gal. cream vat, one 375 gal. churn, 24 bottle tester, eight horse-power engine, 12 horse-power boiler. Condition of building, good, thoroughly sanitary in every department; condition of surroundings, good with extra good drainage; apparatus, good and clean. Average test of milk, 4.3 per cent. Yearly production of butter, 150,000 lbs; color, medium; salt, medium; number of patrons, 80; market, New York.

Chicora Creamery, Chicora, Mich. Geo. Austin, manager. Yearly receipts of milk are included in Allegan Creamery report. Outfit consists of one No. 1 separator, 400 gal. receiving vat, six horse-power engine, 10 horse-power boiler. Condition of building, good and sanitary; of apparatus, good and clean; of surroundings, fair with good drainage. Yearly production of butter is included in Allegan Creamery report. Average test of milk, 4.3 per cent; number of patrons, 105.

Dorr Creamery, Dorr, Mich. E. S. Botsford, manager. Yearly receipts of milk, 3,100,000 lbs. Outfit consists of two No. 1 separators, 500 gal. milk vat, 400 gal. cream vat, 500 gal. churn, 32 bottle tester, 300 gal. skim milk vat, 10 horse-power engine, 15 horse-power boiler. Condition of buildings, good and sanitary; of apparatus, good and clean; of surroundings, good with good drainage. Average test of milk, 5.0 per cent; yearly production of butter, 155,000 lbs; color, medium; salt, medium; number of patrons, 113; market, New York.

Hamilton Creamery, Hamilton, Mich. H. J. Brouwer, manager. Yearly receipts of milk are included in the Allegan Creamery report. Outfit consists of one No. 1 separator, 250 gal. milk vat, 100 gal. cream vat, 24 bottle tester, six horse-power engine, 10 horse-power boiler. Condition of buildings, good and sanitary; of apparatus, good and clean; surroundings and drainage, good. Average test of milk, 4.3 per cent; yearly production of butter included in the Allegan Creamery report; number of patrons, 60.

Hilliards Creamery, Hilliards, Mich. H. E. Parmelee, manager. Yearly receipts of milk, 3,000,000 lbs. Outfit comprises two No. 1 separators, 700 gal. milk vat, 300 gal. twin cream vat, 24 bottle tester, 300 gal. ripener, 12 horse-power engine, 20 horse-power boiler. Condition of building, good and sanitary in every department; of apparatus, good and clean; of surroundings, good with good drainage. Average test of milk, 4.2 per cent; yearly production of butter, 130,000 lbs; color, medium; salt, medium; number of patrons, 115; market, Philadelphia.

Hopkins Creamery, Hopkins Station, Mich. H. H. Stroud, manager. Yearly receipts of milk, 2,700,000 lbs. Outfit consists of one No. 1 separator, 400 gal. milk vat, one 300 gal. cream vat, 300 gal. churn, 20 bottle tester, 10 horse-power engine, 15 horse-power boiler. Condition of building fine, a model creamery; apparatus, good and clean; surroundings, fine. Average test of milk, 4.8 per cent; yearly production of butter, 135,000 lbs; number of patrons, 70; market, New York.

Martin Creamery, Martin, Mich. A. C. Monteith, manager. Yearly receipts of milk, 2,207,000 lbs. Outfit consists of two No. 1 separators, 500 gal. milk vat, 600 gal. cream vat, 300 gal. churn, 24 bottle tester, eight horse-power engine, 12 horse-power boiler. Condition of building and apparatus, good and sanitary. Average test of milk, 4.2 per cent; yearly production of butter, 110,000 lbs; number of patrons, 135; market, Michigan Asylum, Kalamazoo.

Monterey Creamery, Monterey, Mich., H. H. Stroud, manager. Yearly receipts of milk and butter are included in the Hopkins Creamery report. Outfit consists of one No. 1 separator, one 500 gal. milk vat, one 10 horse-power boiler. Apparatus and surroundings, good; average test of milk, 4.8 per cent; number of patrons, 68.

Otsego Creamery, Otsego, Mich., C. I. Currey, manager. Yearly receipts of milk, 2,400,000 lbs. Outfit consists of one No. 1 separator, 400 gal. milk vat, 300 gal. cream vat, 300 gal. churn, 24 bottle tester, 12 horse-power engine, 15 horse-power boiler. Building and apparatus in good sanitary condition. Average test of milk, 4.2 per cent; yearly production of butter, 120,000 lbs; number of patrons, 150; market, Philadelphia.

Rudell Creamery, Bradley, Mich., I. E. Wait, manager. Yearly receipts of milk, 1,080,000 lbs. Outfit consists of one No. 1 separator, 100-gal. milk vat, 200-gal. cream vat, 6 horse-power engine, 12 horse-power boiler, Condition of building and apparatus good and sanitary; good drainage and surroundings. Average test of milk, 4.2 per cent: Yearly production, 200,000 lbs. of cream; number of patrons, 63; market, Grand Rapids.

Wayland Creamery, Wayland, Mich., E. W. Pickett, manager. Yearly, production of milk, 2,802,761 lbs. Outfit comprises two No. 1 separators, 500 gal. milk vat, 400 gal. cream vat, 375 gal. churn, 300 gal. skim milk vat, 32 bottle tester, 10 horse power engine, 15 horse-power boiler. Condition of building good and sanitary; of apparatus, good and clean; drainage and surroundings, good. Average test of milk, 4.8 per cent; yearly production of butter, 140,135 lbs.; color. medium; salt, medium; number of patrons, 135; market, Kalamazoo.

Barry County.

Cold Spring Creamery, Middleville, Mich., F. G. Clark, manager. Yearly receipts of milk, 6,000,000 lbs. Outfit comprises three separators, 400 gal. milk vat, 600 gal. cream vat, 500 gal. churn, 32 bottle tester, 10 horse-power engine, 20 horse-power boiler. Condition of building, good and clean; of apparatus, clean and thoroughly sanitary: surroundings, good with good drainage; average test of milk, 4.2 per cent; yearly production of butter, 270,000 lbs.; color, medium; salt. medium; number of patrons, 350; market, Buffalo.

Freeport Creamery, Freeport, Mich., F. D. Brayton, manager. Yearly receipts of milk, 6,600,000 lbs. Outfit comprises four separators, 500 gal. milk vat, 400 gal. cream vat, 800 gal. churn, 40 bottle tester, 15 horse-power engine, 30 horse-power boiler. Sanitary condition of building, fine; of apparatus, clean and neat; of surroundings and drainage, good. Average test of milk, 4.3 per cent; yearly production of butter, 300,000 lbs.; color, medium; salt, medium; number of patrons, 300; market, New York.

Hickory Corners Creamery, Hickory Corners, Mich., P. W. Lawrence, manager. Yearly receipts of milk, 76,000 lbs. Outfit comprises one No. 1 separator, 500 gal. milk vat, 400 gal. twin cream vat, 24 bottle tester, 375 gal. churn, one 10 horse-power engine, one 15 horse-power boiler. Condition of building, new and sanitary; of apparatus, new and

clean; surroundings and drainage, good. Average test of milk 4.1 per cent; yearly production of butter, 34,000 lbs. Color, medium; salt medium; number of patrons, 35; market, Battle Creek.

Nashville Creamery, Nashville, Mich., owners, Nashville Creamery Co. Yearly receipts of milk, 1,200,000 lbs. Outfit comprises one No. 1 separator, 500 gal. milk vat, 300 gal. cream vat, 32 bottle tester, 10 horse-power engine, 25 horse-power boiler, 375 gallon churn. Condition of building, good and sanitary; of apparatus, clean and neat; surroundings and drainage, good. Average test of milk, 4.2 per cent; yearly production of butter, 52,000 lbs. Color, medium; salt, medium; number of patrons, 45; market, Buffalo.

Woodland Creamery, Woodland, Mich. B. S. Halley, manager. Yearly receipts of milk, 3,000,000 lbs. Outfit comprises two separators, 500 gal. milk vat, 600 gal. cream vat, 400 gal. churn, 15 horsepower engine, 25 horsepower boiler, 32 bottle tester. Condition of building, good and clean in every department; of apparatus, neat and thoroughly sanitary; surroundings and drainage, good. Average test of milk, 4.2 per cent; yearly production of butter, 130,000 lbs.; color, medium; salt, medium; number of patrons, 150; market, Buffalo.

Berrien County.

Three Oaks Creamery, Three Oaks, Mich. H. P. Becker, manager. Yearly receipts of milk, 2,000,000 lbs. Outfit comprises three No. 1 separators, 500 gal. milk vat, 400 gal. cream vat, 300 gal. churn, 24 bottle tester, 10 horse-power engine, 15 horse power boiler. Condition of building, sanitary and clean; of apparatus, fine; surroundings and drainage, good. Average test of milk, 4.4 per cent; yearly production of butter, 86,006 lbs.; color, medium; salt, medium, number of patrons, 110.

Gratiot County.

Alma Creamery, Alma, Mich. G. N. Hutchinson, manager. Yearly receipts of milk, 3,360,000 lbs. Outfit consists of two No. 1 separtors, 400 gal. milk vat, 400 gal. cream vat, 300 gal. churn, 10 horsepower engine, 15 horsepower boiler, 24 bottle tester. Condition of building, sanitary; of apparatus, good and clean; surroundings and drainage, good. Average test of milk, 4.2 per cent; yearly production of butter, 152,761 lbs.; color, high; salt, medium; number of patrons, 500; market, New York.

Ionia County.

Lake Odessa Creamery, Lake Odessa, Mich. Roberts Bros., managers. Yearly receipts of milk, 2,200,000 lbs. Outfit comprises one No. 1 separator, 400 gal. milk vat, 300 gal. cream vat, 375 gal. churn, 10 horse-power engine, 15 horse-power boiler, 24 bottle tester. Condition of building, new and sanitary in every department; of apparatus, new, neat and clean; surroundings and drainage, good. Average test of milk, 4.2 per cent; yearly production of butter, 100,000 lbs.; color, medium; salt, medium; number of patrons, 120; market, New York.

Lenawee County.

Cadmus Creamery, Cadmus, Mich. L. McLauter & Son, managers. Yearly receipts of milk, 1,606,000 lbs. Outfit comprises two separators, 600 gal. receiving vat, 200 gal. twin cream vat, 300 gal. churn, one butter worker, one 6 horse-power boiler, one 15 horse-power gasoline engine. Condition of building, good and sanitary; of apparatus, good and clean; surroundings and drainage, good. Average test of milk 4.0 per cent; yearly production of butter, 73,000 lbs. Color, high; salt, high; number of patrons, 51; market, home.

Hudson Creamery, Hudson, Mich. H. E. Loyster, manager. Outfit comprises two No. 1 separators, 300 gal. receiving vat, 200 gal. ripener, two 250 gal. churns, one butter worker, 24 bottle tester, one 5 horse-power engine, one 16 horse-power boiler. Sanitary condition of building, fair; of machinery and utensils, good. Average test of milk, 4.1 per cent; yearly production of butter, 50,000 lbs.; color, medium; salt, medium; market, Boston and Cleveland.

Locus Farm Creamery, Madison, Mich. A. B. Graham, manager. Yearly receipts of milk, 1,642,500 lbs. Outfit comprises one No. 1 separator, 400 gal. receiving vat, 150 gal. cream vat, 300 gal. churn. one butter worker, one 8 horse-power engine, one 15horse-power boiler. one 32 bottle tester. Condition of building, good, sanitary in every department; of apparatus, clean and sanitary; surroundings and drainage good. Average test of milk, 4.5 per cent; yearly production of butter, 73,000 lbs.; of cream, 35,500 lbs.; number of patrons, 37; market, home.

Maple City Creamery, Adrian, Mich. Higbee & Hatcher, managers. Outfit comprises one No. 1 separator, two 300 gal. receiving vats, one milk heater, 200 gal. milk vat, 200 gal. cream vat, 300 gal. pasteurizer. 100 gal. cream pasteurizer, one bottle washer, one large ice vat, 100 gal. churn, one 8 horse power engine, one 25 horse-power boiler. Condition of building, new, cement floors, first-class in every particular; of apparatus, new and nicely arranged; surroundings are first-class and drainage good. Capacity of creamery, 12,000 lbs. Commenced business about December 10.

Ottawa County.

Holland Creamery, Holland, Mich. C. J. Lockker, manager. Outfit comprises two No. 1 separators, 500 gal. receiving vat, two 300 gal. cream vats, one 300 gal. churn, 10 horse-power engine, 25 horse-power boiler, one 40 bottle tester. Building, large; outfit, neat and clean and nicely arranged. Capacity of creamery, 20,000 lbs.; market, New York.

St. Joseph County.

Centreville Creamery, Centreville, Mich. R. M. Cauffman, manager. Outfit comprises one No. 1 separator, 500 gal. milk vat, 300 gal. cream vat, 32 bottle tester, 375 gal. churn, 10 horse-power engine, 15 horse-power boiler. Condition of building, new, neat and clean; of appara-

tus, new, thoroughly sanitary; surroundings and drainage, good. Average test of milk, 4.1 per cent; yearly production of butter, 34,000 lbs.; color, medium; salt, medium; number of patrons, 36; market, Philadelphia.

Mendon Creamery, Mendon, Mich. Samuel Hoch, manager. Yearly receipts of milk, 3,000,000 lbs. Outfit comprises two separators, 500 gal. milk vat, 300 gal. cream vat, 32 bottle tester, 12 horse-power engine, 20 horse-power boiler, 250 gal. churn. Condition of building, good and sanitary; of apparatus, good and clean; surroundings and drainage, good. Average test of milk, 4.4 per cent; yearly production of butter, 130,000 lbs.; color, medium; salt, high; number of patrons, 127; market, Philadelphia.

Riverside Creamery, Three Rivers, Mich. Riverside Creamery Co., managers. Yearly receipts of milk, 1,000,000 lbs. Outfit comprises one No. 1 separator, 500 gal. milk vat, 400 gal. cream vat, 24 bottle tester; 250 gal. churn, 12 horse-power engine, 15 horse-power boiler. Condition of building, new, sanitary in every department; of apparatus, new, neat and clean; surroundings, extra good; drainage, good. Average test of milk, 4.2 per cent; yearly production of butter, 45,000 lbs.; color, medium; salt, medium; number of patrons, 35; market, home.

Allegan County:

Bates Cheese Factory, Moline, Mich., E. N. Bates, manager. Yearly receipts of milk, 2,100,000 lbs. Outfit consists of 700 gal. cheese vat, 32 hoop press, 4 horse-power engine, 4 horse-power boiler. Condition of building, new, nicely arranged, a model of convenience; of apparatus, fine in every particular; surroundings, good with good drainage. Yearly production of cheese, 210,000 lbs. Number of patrons, 70; market, home.

Hopkinsburg Cheese Factory, Hopkins Station, Mich., Mrs. Ida Mankin, manager. Yearly receipts of milk, 1,200,000 lbs. Outfit consists of 600 gal. cheese vat, 20 hoop gang press, 10 horse-power boiler. Condition of building, fair and sanitary; of apparatus, good and clean; of surroundings, fair, with good drainage. Yearly production of cheese, 120,000 lbs. Number of patrons, 40; market, home.

Springdale Cheese Factory, Hopkins Station, Mich., M. W. Hicks, manager. Yearly receipts of milk, 1,000,000 lbs. Outfit consists of 700 gal. cheese vat, 18 hoop press, 6 horse-power boiler. Condition of building, good, sanitary in every department; of apparatus, good and clean; of surroundings, extra good, good drainage. Yearly production of cheese, 100,000 lbs. Number of patrons, 46; market, Grand Rapids.

Lenawee County:

Bogard Cheese Factory, Adrian, Mich., Peter Bogard, manager. Yearly receipts of milk, 800,000 lbs. Outfit consists of 700 gal. cheese

vat, 18 hoop press, 10 horse-power boiler. Condition of building, good and clean; of apparatus, extra clean and thoroughly sanitary; of surroundings, good, good drainage. Yearly production of cheese, 80,000 lbs. Number of patrons, 30; market, home.

Cadmus Cheese Factory. Cadmus, Mich. F. Potts, manager. Yearly receipts of milk, 700,000 lbs. Outfit consists of one 500 gal. cheese vat, one 20 hoop upright press, one curd sink. Condition of building, fair and fairly clean; of apparatus, good and clean; of surroundings. good, good drainage. Yearly production of cheese, 70,000 lbs.; market, home.

Clayton Cheese Factory, C. C. Colvin & Co., managers; E. A. Blurton, cheese maker. Outfit consists of two 600 gal. cheese vats, one curd sink, one 15 hoop press, one 10 horse-power boiler; brand Michigan Full Cream Cheese. Condition of building, utensils, surroundings and drainage, good. Yearly production of cheese, 125,000 lbs.; market, Ohio and Indiana.

Hudson Cheese Factory, Hudson, Mich. D. W. Rhead & Co., managers. W. H. Hamp, cheese maker. Outfit consists of three 400 gal. cheese vats, one curd sink, one 20 hoop press, one 10 horse-power boiler; brand, Michigan Full Cream Cheese. Condition of buildings, apparatus. surroundings and drainage, good. Yearly output of cheese, 100,000 lbs; number of patrons, 40; market, Illinois.

Medina Cheese Factory, Medina, Mich. C. C. Colvin & Co., managers. Fred Bryan, cheese maker. Outfit consists of one 500 gal. cheese vat, one 600 gal. cheese vat, one curd sink, two 18 hoop gang presses, one 10 horse-power boiler. Condition of building, drainage, apparatus and surroundings, good. Yearly output of cheese, 200,000 lbs; number of patrons, 45; brand, Michigan Full Cream Cheese; market, home and Indiana.

Riverside Cheese Factory, South Fairfield, Mich. E. L. Baker, manager. Yearly receipts of milk, 1,808,700 lbs. Outfit consists of three 600 gal. cheese vats, one curd sink, 35 hoop gang press, one 5 horse-power boiler. Condition of building, good, clean and sanitary; of apparatus, clean and neat; of surroundings and drainage, good. Yearly production of cheese, 181,870 lbs; number of patrons, 40; market, Grand Rapids.

Rollin Cheese Factory, Rollin, Mich. B. L. Peebles, manager and cheese maker. Outfit consists of two 500 gal. vats, one 19 hoop gang press, one curd sink, one 10 horse-power boiler. Condition of building and apparatus, good; of surroundings and drainage, fair; brand, Michigan Full Cream Cheese; number of patrons, 39. Yearly production of cheese, 100,000 lbs; market, Ohio.

Wolf Creek Cheese Factory, Wolf Greek, Mich. L. W. Baker, manager. Condition of buildings, good and clean; of apparatus. clean and

thoroughly sanitary; of surroundings, good, good drainage. Outfit consists of one 800 gal. cheese vat, 24 hoop gang press, 20 horse-power boiler. Yearly receipts of milk, 1,000,000 lbs. Yearly production of cheese, 100,000 lbs. Brand, "Michigan Blue Ribbon." Number of patrons, 45; market, home.

The following eight cheese factories owned by George B. Horton, aggregate in yearly receipts of milk, 12,600,000 lbs. Yearly production of cheese, 1,260,000 lbs. Number of patrons, 339. Brand, "Horton's Michigan Cheese."

Canandaigua Cheese Factory, Canandaigua, Mich., George B. Horton, owner. Outfit consists of three 500 gal. cheese vats, 30 hoop upright press, one curd sink, one 6 horse-power boiler. Condition of building, good, clean and sanitary; of apparatus, clean and sanitary; of surroundings, good; good drainage.

Fairfield Cheese Factory, Fairfield, Mich., George B. Horton, owner. Outfit consists of two 600 gal. cheese vats, one curd sink, one 20 hoop press, one 10 horse-power boiler. Condition of building, good and sanitary; of apparatus, thoroughly clean and sanitary; of surroundings, clean and good; good drainage.

Hudson Center Cheese Factory, Hudson Center, Mich; George B. Horton, owner. Outfit consists of three 400 gal. cheese vats, one curd sink, 22 hoop press, one 10 horse-power boiler. Condition of building, good and clean; of apparatus, clean and sanitary; of surroundings, clean; good drainage.

Jasper Cheese Factory, Fruit Ridge, Mich., George B. Horton, owner. Outfit consists of two 500 gal. vats, one curd sink, 40 hoop press. Condition of building, good and sanitary in every départment; of apparatus, good and clean; of surroundings, good; good drainage.

Sand Creek Cheese Factory, Sand Creek, Mich., George B. Horton, owner. Outfit consists of two 700 gal. cheese vats, one curd sink, one 13 hoop press, one 20 hoop press. Condition of building, good and sanitary in every department; of apparatus, good and clean; of surroundings, good; good drainage.

Seneca Center Cheese Factory, Seneca Center, Mich., George B. Horton, owner. Outfit consists of two 500 gal cheese vats, one curd sink, 25 hoop upright press, 20 hoop gang press. Condition of building, good and sanitary; of apparatus, clean, neat and sanitary; of surroundings, good; good drainage.

Weston Cheese Factory, Weston, Mich., George B. Horton, owner. Outfit consists of two 500 gal. cheese vats, one curd sink, 18 hoop upright press. Condition of buildings, good and sanitary in all departments; of apparatus, good and clean; of surroundings, good; good drainage.

Home Factory, Fruit Ridge, Mich., George B. Horton, owner. Outfit consists of two 100 gal. cheese vats, one curd sink, 32 hoop press. Condition of building, sanitary in every department; of apparatus, good and clean; of surroundings, good; good drainage.

Saginaw County.

Brant Cheese Factory, Brant, Mich., T. A. Cook, manager. Outfit consists of 900 gal. cheese vat. 20 hoop gang press, 10 horse-power boiler. Yearly receipts of milk, 600,000 lbs. Yearly production of cheese, 66,000 lbs. Condition of building, clean and sanitary in every department; of apparatus, good and clean; of surroundings, good; good drainage. Number of patrons, 40; market, home.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief syncrosis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;

2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;

3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;

4. If it is in imitation of, or is sold under the name of another article;
5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal:

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which

7. If it contains any added substance or ingredient which is poisonous

or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;

They must contain nothing injurious to health:

They must not be sold in imitation of, or under the name of another article:

4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound;

5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound. coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar,

phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled, "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTEE.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter. Candy.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health CATSUP.—All packages containing same must bear the name and address of the

manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cheese is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

COFFEE SUBSTITUTE.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATES AND COCOAS.—If containing no other substances than cocoa mass

sugar and flavoring will not be classed as a compound or mixture.

CANNED GOODS.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica in size. The sale of peas or other vegetables greened with copper is prohibited.

CEEAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof,

even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

color. This includes all extracts of vanilla or tonks, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FARINACEOUS GOODS.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear

the name and address of the manufacturer or compounder thereof.

Howey.—Must be pure. Cannot be mixed with glucose or other substances and

sold as "Honey Compound."

JELLY.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

Lard.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquors.—Spirituous, fermented, or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.

MAPLE SUGAR AND MAPLE SYRUP.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple

Syrup Compound."

MILK.—Must contain not less than 3 per cent fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any sub-

stance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives to milk is prohibited.

Molasses.—Must be branded with its true and appropriate name and must be

true to same. (See Syrup.)

OLEOMABGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing eleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica

in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANCAKE FLOURS.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and

address of the manufacturer or compounder.

PEPPER.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard" and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

Process Butter.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed

in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them plain and prominent.

Syrups.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture" and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though

the package be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

A. W. SMITH, · _	-	-	-	-	-	- COMMISSIONER
PERLEY C. HEALD,		-	-	-	-	DEPUTY COMMISSIONER
DE DOOLITEELE	_	_	_	_		Cmamp ANAIVET

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1902.	
Cases pending July 1, 1902	29 33
Cases nolle prossed	4
CASES DISPOSED OF.	•
Before examining magistrates:	
Defendants bound over to trial courts	24
In trial courts:	_
Defendants convicted Defendants acquitted	
Cases pending April 1, 1903	

PROCEEDINGS HAD DURING THE MONTH OF MARCH.

In the case pending in the circuit court for the county of Saginaw against E. W. Hinshaw, manager of Malcomson's Tea Store, Saginaw, charged with selling adulterated extract of Vanilla, on March 23rd, defendant was convicted and a stay of proceedings of thirty days granted pending an appeal to the supreme court.

The evidence on the trial introduced by the defendant tended to show that lemon oil contains from three to ten per cent citral, so-called, and upwards of ninety per cent of so-called turpenes; that these turpenes represent the oil property; that they are in reality the oil itself freed from the citral; that citral is the principal flavoring and odor-bearing property of lemon oil; that the tendency of turpenes in the oil of lemon is to deteriorate or become rancid by long standing, and that because of this the extract or spirits of lemon in which turpenes appear in usual quantitles becomes turpentiney, both in smell and taste, and that for this reason it is undesirable to have turpenes present; that the turpenes have a biting taste, easily developing a turpentine taste, not the true flavor of the lemon fruit. There was also testimony tending to show that this fact created a demand for turpenless oils and that turpenless lemon oils had been manufactured and sold commercially for a considerable time.

On the part of the prosecution the testimony of the chemist of the Pure Food Department was to the effect that taking as a standard of extract of lemon the spirits of lemon as defined by the United States Pharmacopoeia formula that the extract produced by the respondent showed no lemon oil present. It further appears that spirits of lemon made according to the pharmacopoeia formula would contain from 25-100 to 35-100 of one per cent of citral. It also appeared that 30 per cent of alcohol appeared in the product made by respondent, and that according to the pharmacopoeia formula 80 per cent was used, and that it cost less to make the extract using but 30 per cent of alcohol than if 80 per cent was used. It was also shown that a trace of coal tar dve was found in the extract made by respondent, but it was conceded that there was nothing whatever injurious in the extract as prepared by Mr. Jennings. The extract sold by respondent was made by what is known as the shaking out process, the purpose being to make an extract that contains no oil and as little alcohol as possible, a product that simply contains the flavoring properties of the lemon oil without the turpenes. This system has been employed by Mr. Jennings and by other manufacturers for the past three years; and it is claimed that all the elements and properties of lemon oil remained except the turpenes, and the testimony tended to show that the complete flavoring qualities are extracted by this process.

The circuit judge charged the jury as follows:

"In 1895 the Legislature of this State thought it wise to pass a law relative to the adulterations of food and food products. Perhaps there may have been some amendments since that time, but that was the foundation of the law. That law covers lemon extract as it covers all other products that are sold on the market. It seems at the time that the law was passed and since that time there hasn't been—there isn't incorporated within that law any specific formula for the manufacture of lemon extract. Now, we can hardly say, gentlemen of the jury, that at the time of the passage of that law that the legislature didn't have some recognized and defined standard by which these essences or extracts should be governed or controlled. I thing it would be hardly fair to the legislature to claim that there wasn't a standard they had in their mind at that time, and for the purposes of this case I will instruct you, gentlemen, that at that time and at this time this standard that ap-

pears here in the United States Pharmacopoeia is the standard recognized by the legislators of this State and the one to which—the one that is in force so far as it applies to the Pure Food Law of this State with reference to that particular product. And if this lemon extract is manufactured in conflict with that formula as I shall hereafter call your attention to it, and you should find from the evidence, why it would be your duty to convict the defendant here.

"By that formula it appears that it is necessary to have five per cent of lemon oil in the lemon extract and that lemon oil shall be cut by a sufficient quantity of alcohol to perform that act. Of course, you know that that means in common parlance it should dissolve the oil. In addition to that, as the evidence tends to show in this case, after those things are put together, the fluid, whatever it might be, would be nearly the color of water. As coloring there may be or should be five per cent of lemon rind, and those ingredients when added together would be lemon extract, and that, gentlemen, will be the standard as applied to the Pure Food Law of this State. Now, gentlemen, I don't mean by that statement that lemon extract cannot be manufactured by any other process except by that to which I have called your attention. mean that. It is the claim of the defendant here that he has discovered a process by which he can manufacture lemon extract containing all of the qualities that lemon extract manufactured according to that formula would possess and not have entirely all of the ingredients in the first instance that are provided in the formula. And as I view this case. gentlemen, that is one of the important propositions in connection with this case—that, and the questions of coloring—in the judgment of the court is the case, and that all of the testimony in the case here revolves itself about those two propositions.

"It is the claim of the defendant, as I say, he has discovered a process by which he can produce in this lemon extract all of the qualities that would be produced by adding alcohol and lemon oil together, and that manufacturing it by that means he produces it chemically by taking a larger quantity of lemon oil and extracting certain parts of it. gentlemen, if you find and are satisfied by the evidence in this case that after this lemon extract was manufactured as defendant here claims he did manufacture it possesses all the qualities in strength and otherwise that it would possess if manufactured according to this formula, he is not guilty under this law. That is, he is not guilty of manufacturing an impure article, unless there are certain other articles that enter into the case to which I call your attention. As I say, in the first instance, it is claimed that according to the formula it should be alcohol and five per cent of lemon oil. Now if by some other process he can manufacture from the lemon oil and alcohol a product that would contain all of the elements that these two elements would contain if so mixed, he would not be guilty so far that would be lemon extract except the color of it.

"It is conceded here by all parties in interest, I think, that the only object of the lemon peel is to produce coloring. But there is another element to which the prosecuting attorney has called our attention. The evidence tends to show, gentlemen, that if this product is produced as claimed here on the part of the defendant, that after production by his process that the product would be nearly white. As I say, if it contained all of the elements of lemon extract, I don't think he would be

guilty under this law, and if you are so satisfied, of course, at that point it would be your duty to find a verdict of not guilty unless there is some other matter in which he has violated this law.

"There is another provision of this Pure Food Law that provides that ingredients shall not be colored. In this case it appears that after this fluid substance is produced which he claims is just the same as produced under this formula, that he desires to change it to a lemon color. In other words, he puts in an ingredient which he claims would produce the same effect as this lemon rind. What is the object, gentlemen, or what was the object of Mr. Jennings adding this color? If the object was by any means to make it appear better or of greater value than it really is; if that was the object in adding that product of course it is your duty without any question to find this defendant guilty, because he hadn't any right to add that kind of a product or any other kind of a product to this fluid which he had produced and sell it for lemon extract, because that is a direct violation of one of the provisions of this Pure Food Law."

We think this charge presents fairly three questions for consideration: First, whether the pharmacopoeia formula is to be considered as defining lemon extract; second, if so, whether an omission of ingredients not essential to its purposes as a food product is a violation of the statute; third, whether the instruction relative to the addition of coloring matter should be sustained.

The statute defining what shall be deemed adulteration, so far as it relates to this case, declares that an article shall be deemed adulterated when: "First, if any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity; second, if any inferior or cheaper substance or substances have been substituted wholly or in part for it; third, if any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; fourth, if it is an imitation of, or is sold under the name of another article; " " sixth, if it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value that it really is; seventh, if it contains any added substance or ingredient which is poisonous or injurious to health." Compiled Laws, Sec. 5012.

We are agreed with the circuit judge that in referring to articles of food and to protect the users thereof the legislature must have had in view some standard, and as lemon essence or lemon extract had theretofore acquired a well-defined meaning we incline to the view that it is proper to resort to the pharmacopoeia formula for the purpose of determining what lemon extract consists of. Does it follow from this that the legislature intended to prohibit improvement in the manufacture of lemon extract? If a means should be discovered by which a larger percentage of the flavoring quantity of the lemon might be extracted would it be an infraction of this law that the manufacturer should use such larger proportion of the essential ingredient of the lemon extract? We think not. We think it is open to manufacturers to improve a common article of food so long as no infringement of the law or spirit of the act defining what shall be deemed adulteration takes place. According to the proofs offered by the defendant it is very clear in the present case no substance or substances have been mixed with this extract so as to lower or depreciate or injuriously affect its quality, strength or purity.

Digitized by GOOGIC

As to the second condition which amounts to adulteration the case is not so clear. This provides that if any inferior or cheaper substance or substances have been substituted wholly or in part for it, that it shall amount to adulteration. We think, however, this provision should be read in connection with the succeeding one, to-wit: "If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it." So construed the provision prohibiting the substitution of any inferior or cheaper substance, wholly or in part, for it means the substitution for an essential ingredient of such cheaper or inferior substance. Now if it be a fact, as the testimony on the part of the respondent tends to show, that it is a positive advantage to exclude the turpene wholly from the extract and to lessen the quantity of alcohol used, then the essential ingredients of lemon extract have not had substituted for them anything inferior or cheaper. We are aware that this view of the law may make it more difficult to establish the individual case, but as the statute is a penal statute it should receive a strict construction.

It follows from the views above expressed that the instruction of the learned circuit judge was erroneous inasmuch as the jury were told in effect that if any ingredient of lemon essence as defined by the pharmacopoeia was wanting in this extract sold by the respondent that there should be a conviction. We think the instruction should have been that if the lemon extract sold by respondent contained all the ingredients and in quantities such as prescribed by the pharmacopoeia which are adapted to use as food, and that nothing was eliminated except such ingredients as could be dispensed with without injury to the product as a food product there was no violation of the statute.

The only other provision of the statute involved is the sixth, which in effect prohibits coloring the article produced whereby damage or inferiority is concealed. The instruction upon this branch of the law was also erroneous if we are correct in our view of the main question. The elimination of non-essential ingredients from the extract certainly does not show damage or inferiority, and as the conceded facts are that the coloring matter employed was not injurious to health in any way this

provision has no application.

The other questions discussed do not require special mention. It may be noted in passing that the circuit judge in referring to the testimony of expert witnesses spoke of it as boughten testimony. We think this expression was unfortunate. While it is proper for the jury to take into account the fact that expert witnesses are employed at an extra compensation paid them, the implication that the extra compensation necessarily amounts to a purchase of their testimony is hardly warranted; while the jury may consider this fact as bearing on their credibility, it is not proper that the court should intimate an opinion of that character.

The judgment should be reversed, and a new trial ordered.

The other Justices concurred.

FOUL BROOD AMONG BEES, ITS SYMPTOMS AND TREATMENT AND THE LAW REGARDING THE DISEASE.

BY W. Z. HUTCHINSON,

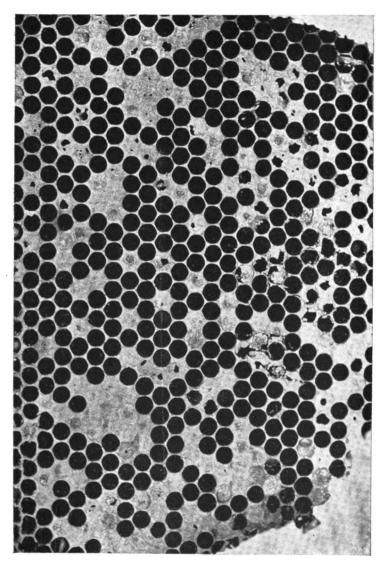
State Inspector of Apiaries.

Foul Brood is a bacterial disease of the larvae or brood of bees. Once a single spore of the disease comes in contact with a larva, or is fed to it, it begins to increase with wonderful rapidity, the bacteria feeding upon the larva as maggots feed upon the carcass of a dead animal. larvae soon dies and turns a dull brown, something about the color of coffee after milk has been added and it is ready for drinking. The larvae soon looses its shape and settles down into a ropy, gluey mass, having an odor somewhat similar to a poor quality of glue when it is warming on the stove being made ready for use. At first this odor is not noticeable, but, as the disease increases this odor is quite pronounced. If a match, or a wooden toothpick, or something of this nature, is thrust into the dead larva, and then withdrawn, the dead matter will adhere to the stick and draw out in a ropy string perhaps half an inch in length before it will break and fly back. This ropiness is the crucial test. Without this there is no foul brood. With it, foul brood is always present. The dead larva finally dried down into a thin brown scale on the lower side of the cell. By holding the comb so that the light falls into the cells at just the right angle, a little practice will enable one to see these little dark brown scales on the sides of the cells.

A large share of the brood reaches that stage that the bees seal it over, but, for some reason, the cappings often become sunken and sometimes contain holes. Of course, the healthy brood hatches, while the diseased brood does not, and soon the combs present a peculiar speckled appearance from part of the cells being empty, while others are sealed with the dark, ragged cappings.

When the bees attempt to rear another larva in the cell in which a larva has died of foul brood, it is certain to be a failure. This larva, too, dies of the disease. If honey is stored in this cell it becomes contaminated with the germs of the disease, and if fed to other larvae infects them with the disease. The combs of a colony finally become so contaminated with the disease that scarcely any brood can be reared. The old bees die off from natural causes, and, there being no young bees reared to take their places, the colony dwindles away until it becomes a prey to robber-bees, who carry home the diseased honey and thus start the infection in their homes. In this way the disease is spread from hive to hive, and from apiary to apiary.

After the disease has reached an advanced stage, when the bees are nearly all gone and the combs are rotten with the disease, the best thing to do is to destroy the bees with the fumes of burning sulphur, and destroy the combs. To destroy the bees, get a fire nicely to going in a beesmoker, then put in to the smoker about a tablespoonful of sulphur, put on the cover, and blow the smoke into the entrance of the hive. A few



A COMB BADLY AFFECTED WITH FOUL BROOD.

puffs of this occasionally, for four or five minutes will surely kill the bees. It is well to do this at evening when all of the bees are in the hive, then none will be scattered into adjoining hives. By fire is the way to destroy the combs and frames, and, if it is at a time when the bees will rob, the work ought to be done after the bees have ceased flying at night. Don't burn the combs upon the top of the ground, as the honey from the combs will run out upon the ground, outside of the edge of the fire, and the bees will find it and carry it home. Dig a trench two feet wide, and a foot deep, having a length in proportion to the amount of material that must be burned. Build a fire in this trench, and when it is well to going, gradually add a comb or two at a time.

While wax will burn readily, honey is about like so much water, so far as adding to the heat and flame of the fire. If the old hives are to be burned they will aid greatly in burning the combs. If the hives are not to be burned, then some kind of good fuel must be used. As the combs melt and burn, the honey will run down to the bottom of the trench where it will eventually become covered with a bed of coals and be burned up. When all has been reduced to a cinder, then the earth may be thrown over it with a certainty that no infection will ever come

from it.

In most cases it is probably safe to use the hive again, but, to make assurance doubly sure, it is well to burn it out. Paint the inside of the hive with kerosene oil. Sprinkle a few planer shavings saturated with the oil inside the hive to start the fire more readily when the match is applied. Allow it to burn until the inside of the hive is blackened. There is no necessity to char it. When it has burned sufficiently, a board can be laid over the hive which will at once smother the flame. Hives thus treated ought to stand open, exposed to the weather, for two or three weeks before they are used, in order to allow the odor of the oil to escape.

Before a colony has become reduced in numbers as the result of disease, foul brood may be gotten rid of by the right kind of management at a time when honey is being gathered. The treatment is as follows: First prepare a new hive, or one free from infection, by putting in new frames furnished with starters of comb foundation. After the bees have stopped flying, toward evening, set the old hive to one side and place the new one on the old stand. Take the combs, one at a time, from the old hive and shake the bees down in front of the new hive that stands upon the old location. Don't shake off all of the bees. Leave a few to care for the brood. The bees in the new hive, on the old stand, are now away The honey in their sacs is probably infected, but, befrom the disease. fore they can build comb and rear brood that honey will have been consumed, hence the bees are in this manner freed from the disease. old hive contains a few bees, and more are hatching out by the thousand each day. It is set upon a new stand, and in three weeks, when all of the brood will have hatched, the bees may all be shaken and brushed off into a new hive furnished with starters, as was the first mentioned new hive. and set upon the new stand of the old line. About a week or ten days after the bees are shaken off the first time, a good, young queen, or a ripe queen cell, should be given the old hive. This queen will thus be ready for business about the last time the bees are shaken off. By this method we get two colonies of bees from the old one, and the new ones are free from the infection. The old combs contain nothing except honey and

dead brood. These can now be destroyed and the hives burned out, when that colony may be considered free from the disease.

All through this work, from beginning to end, let the bee-keeper remember that one drop of the infected honey carried home by a bee

from some healthy colony, means disease in that colony.

Many persons who have only a few bees, and are not greatly interested in them, know little or nothing regarding foul brood. Some have never heard of it. Their colonies, or some of them, die of foul brood. bees from neighboring apiaries come and carry away the honey, thus spreading the infection, the bee moth's larvae destroy the combs, and the owner of the bees says, "the moths killed them." If his neighbor tells him what is the trouble, or tries to show him, he is often inclined to doubt his neighbor's knowledge on the subject, and refuses to rid his yard of the disease. For this reason the State of Michigan has passed a law whereby there is an inspector appointed whose duty it is to inspect all apiaries where the disease is suspected to exist, and to decide in what manner it shall be treated. This law reads as follows:

An Act for the prevention and suppression of foul brood among bees in the State of Michigan, and the inspection thereof, and to make an appropriation therefor, and to repeal act number one hundred forty-one of the public acts of eighteen hundred eighty-one, being Sections fifty-six hundred sixty-three, fifty-six hundred sixty-four, fifty-six hundred sixty-five, fifty-six hundred sixty-six, fifty-six hundred sixty-seven, fifty-six hundred sixty-eight, fifty-six hundred sixty-nine, and fifty-six hundred seventy of the compiled laws of eighteen hundred ninety-seven.

(Act No. 66, Public Acts, 1901.)

The People of the State of Michigan enact:

Section 1. The Dairy and Food Commissioner upon receipt of a certified copy of the record of the Michigan State Bee-Keepers' Association, by the secretary of said association, showing that a majority of the members of said association recommended the appointment of an inspector of apiaries, shall appoint a State inspector of apiaries. Said inspector shall be responsible to the Dairy and Food Commissioner and shall comply with such rules and regulations as the Dairy and Food Commissioner shall from time to time prescribe for the carrying out of the work of said State inspector.

Sec. 2. The Dairy and Food Commissioner shall, when notified in writing by the owner of an apiary or by three disinterested taxpayers in the vicinity of the apiary, cause the inspector to examine such apiaries as are reported and all others in the same locality not reported and ascertain whether or not the disease known as foul brood or other contagious disease exists in such apiaries, and if satisfied of the existence of foul brood, he shall give the owner or care-taker of the diseased apiaries full instructions how to treat said case as in the inspector's judgment seems best.

Sec. 3. The inspector who shall be the sole judge may visit all diseased apiaries a second time and if need be burn all colonies of bees and combs that may be found not cured of foul brood or other contagious diseases.

- Sec. 4. If the owner of a diseased apiary, honey or appliances shall knowingly or willfully sell, barter, or give away any bees, honey or appliances, or expose other bees to the danger of said disease or refuse to allow said inspector to inspect such apiary, honey or appliances, said owners shall on conviction before a justice of the peace, be liable to a fine of not less than fifty dollars nor more than one hundred dollars or not less than one month's imprisonment in the county jail, nor more than two months' imprisonment.
- Sec. 5. In addition to such individual reports as are required under this act by the inspector of apiaries, he shall make an annual report to the Dairy and Food Commissioner, giving the number of the apiaries visited, the number of diseased apiaries found, the number of colonies treated, also the number of colonies destroyed by fire, and an itemized account of his transportation expenses with affidavit annexed thereto.
- Sec. 6. There is hereby appropriated out of any moneys in the State treasury not otherwise appropriated a sum not exceeding five hundred dollars per year for the suppression of foul brood among bees in Michigan. The inspector shall receive three dollars per day and actual transportation expenses for actual time served, which sum shall not exceed the money hereby appropriated, to be paid by the State treasurer upon warrants drawn by the Auditor General and approved by the Dairy and Food Commissioner.
- Sec. 7. Act number one hundred forty-one of the public acts of eighteen hundred eighty-one, being sections fifty-six hundred sixty-three, fifty-six hundred sixty-four, fifty-six hundred sixty-five, fifty-six hundred sixty-seven, fifty-six hundred sixty-eight, fifty-six hundred sixty-nine and fifty-six hundred seventy of the compiled laws of eighteen hundred ninety-seven is hereby repealed.

This act is ordered to take immediate effect.

WARNING AGAINST USE OF PRESERVATIVES IN MILK, ETC.

The attention of milk peddlers and all other dealers in milk and cream is called to Act No. 106, Public Acts, 1899, which prohibits the use of all preservatives in milk or cream. The act complete is as follows:

"Section 1. No person shall offer or expose for sale, sell, exchange or deliver, or have in his possession with intent to sell, exchange or deliver, any milk to which water, chemicals or preservatives, or any other foreign substance, has been added. The term milk as used in this act shall include all skimmed milk, butter milk, cream and milk in its natural state, as drawn from the cow.

Sec. 2. Whoever shall do any of the acts or things prohibited, or neglects or refuses to do any of the acts or things enjoined by this act, or in any way violates any of its provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than one dollar nor more than one hundred dollars and the costs of prosecution, or by imprisonment in the county jail not more than ninety days, or by both such fine and imprisonment in the discretion of the court."

CHEESE FACTORY AND CREAMERY REGISTRATION.

(Extracts from Act No. 193, Public Acts, 1895.) (As amended by Act No. 118, Public Acts, 1897.)

(C. L., 5015.) Sec. 6. Every manufacturer of full milk cheese may put a brand upon each cheese, indicating "Full milk cheese," and no person shall use such a brand upon any cheese made from milk from which any of the cream has been taken. It shall be the duty of the proprietor of every cheese factory, creamery or butter factory in the State where milk or cream is purchased of or contributed by three or more persons, to register the location of such cheese factory, creamery or butter factory, and the name of its owner or manager with the Dairy and Food Commissioner on or before the first day of October, A. D., eighteen hundred and ninety-seven, and on or before the first day of April in each year thereafter. Whoever violates any of the provisions of this section, in so far as it relates to registration, shall be deemed guilty of a misdemeanor, and for each and every offense shall be punished by a fine of not less than five dollars nor more than twenty-five dollars and the costs of prosecution, or by imprisonment in the county jail for not more than thirty days or both.

(C. L., 5016.) Sec. 7. The Dairy and Food Commissioner shall procure and issue to the cheese manufacturers of the State, on proper application, which application shall be made on or before the first day of October. A. D., eighteen hundred ninety-five, and on or before the first

day of April in each year thereafter, and under such regulations as to the custody and use thereof as he may prescribe, a uniform stencil brand, bearing a suitable device or motto, and the words, "Michigan full cream cheese." Every such brand shall be used on the outside of the cheese and upon the package containing the same, and shall bear a separate number for each separate factory. The said commissioner shall keep a book in which shall be registered the name, location and number of each manufactory using the brand, and the name or names of persons at each factory authorized to use the same. No such brand shall be used on other than full cream cheese or packages containing the same. The commissioner shall receive a fee of one dollar for each registration, said fee to be paid by the party applying for the same which amount shall be accounted for and used as a part of the fund appropriated for the enforcement of the laws of this State with which the Dairy and Food Commissioner is charged.

(C. L., 5017.) Sec. 8. No person shall knowingly offer, sell or expose for sale, in any package, cheese which is falsely branded or labeled. * * * * Following will be found a complete list of the cheese factories and creameries of the State registered with the department for the regis-

tration year beginning April 1, 1903.

CHEESE REGISTRATION.

(Registered With Privilege to Use the "Michigan Full Cream Cheese" Brand from April 1, 1903, to April 1, 1904.)

ALCONA COUNTY.

Brand Location and Name of Factory. Postoffice addresses. Owner or manager. No. 4. Mikado Cheese Factory. Mikado. Joshua Minthorn. ALLEGAN COUNTY. 3. Springdale Cheese Factory. Hopkins Station. M. W. Hicks. BAY COUNTY. Amelith, W. Bay City, R. F. D. No. 2, 29. Berger's Cheese Factory. R. F. D. No. 2, John Berger.
Auburn, John M. Nuffer.
Monitor, Auburn, R. No. 1, Lounsberry & Voss. 27. Nuffer Bros. Factory, 65. Monitor Cheese Factory. CLINTON COUNTY. 24. Eagle Cheese Factory, Eagle. J. H. Fish. HIILSDALE COUNTY. Pittsford Cheese Co.,
 Prattville Cheese Factory,
 Bennett Cheese Factory, F. R. Kedzie. Peebles Bros. O. F. Foster. Pittsford. Prattville Wheatland, Hudson, HURON COUNTY. 33. Port Hope Cheese Factory. Port Hope. S. T. Jones. KENT COUNTY. 84. Caledonia Cheese Fig. Co., Caledonia, Jacob Finkbinder. LENAWEE COUNTY. Addison Cheese Co. P. T. Bogert.
C. C. Colvin & Son. Baker & Jurden.
D. W. Rhead & Co. M. E. Dillon.
C. C. Colvin & Son. P. M. Bates. 6. Addison Cheese Co., 88. P. T. Bogert Factory, 86. Clayton Cheese Factory, Addison, Adrian, R. No. 4, Clayton, Adrian. 10. Riverside Factory,
10. Riverside Factory,
20. Hudson Cheese Factory,
12. Hudson Center Cheese Factory,
11. Medina Cheese Factory,
86. Rome Cheese Factory, Hudson, Hudson. Medina, Rome, Adrian, R. No. 4. MACOMB COUNTY. Dudley Bros. 15. Armada Cheese Factory, Armada, MECOSTA COUNTY. 19. Big Rapids Cheese Factory. Big Rapids. Geo. H. Acker. MIDLAND COUNTY. 18. Blue Ribbon Cheese Factory, 44. Hope Cheese Factory, Coleman, W. M. Graves & Co. Williams & Schearer. Норе, MONROE COUNTY.

> Dundee, LaSalle, Monroe, Petersburg, Strasburg,

59. Dundee Cheese Factory,
67. LaSalle Cheese Factory,
78. Euclid Cheese Co.,
9. Strasburg Cheese Factory.

H. W. Smith. Chas. B. Kirby. Oliver T. Rose, Secy. E. C. Sortor. MONTCALM COUNTY.

45. Butternut Cheese Factory, 43. Vickeryville Cheese Factory.

Butternut, J. M. Fitzpatrick. Vickeryville, Carson City, Geo. R. Lowe. Butternut

OAKLAND COUNTY.

60. Milford Cheese Factory, 39. New Hudson Cheese Factory,

Milford, New Hudson.

John Wise. E. J. Rice.

SAGINAW COUNTY.

Flint River Cheese, Butter and Mercantile Co.,
 Union Cheese Mfg. Co.,

Fosters, Frankenmuth, Saginaw, R. No. 4.

J. C. Malone.

John Nuechterlein.

SHIAWASSEE COUNTY.

28. Laingsburg Cheese Co.,

Laingsburg,

Stoney & Bennett.

TUSCOLA COUNTY.

1. Arbela Cheese Co., No. 1, 68. Tuscola Cheese Mfg. Co.,

Arbela, Clio,

J. A. Picket. James McPherson. Tuscola,

VAN BUREN COUNTY.

16. Base Line Cheese Factory, 85. Hartford Cheese Factory,

Bloomingdale, Hartford,

Lynn Reid. S. M. Carpp.

WAYNE COUNTY.

50. Waitz Cheese Co.,

Waltz.

Waltz & Ziegler.

OTHER CHEESE FACTORIES REGISTERED APRIL 1, 1903.

ALLEGAN COUNTY.

Name. Riverside Cheese Factory, Moline Cheese Factory,

Location and Postoffice addresses. Hopkins, Moline,

Owner or manager. Ida A. Mankin. E. N. Bates.

ARENAC COUNTY.

Elm Grove Cheese Factory.

Standish,

Mich. Cooperage Co., Ltd.

BAY COUNTY.

Arn Cheese Factory, Willard Cheese Factory,

Arn, Bay City, Willard, Saginaw,

T. E. Webster. O. Cramer.

BERRIEN COUNTY.

Floral Cheese Factory.

Niles,

F. Tranger.

CASS COUNTY.

Silver Creek Cheese Factory,

Cushing, Dowagiac, R. No. 3.

H. J. Greer.

CLINTON COUNTY.

Maple Leaf Cheese Factory,

Shepardsville,

Johnson & Love.

GENESEE COUNTY.

Vienna Cheese Factory Association, Grand Blanc Cheese Factory,

Clio, Grand Blanc. J. R. Sissins. H. R. Dewey.

GRATIOT COUNTY.

A. H. Barber & Co., A. H. Barber & Co., A. H. Barber & Co.,

Ashley, Chicago, Ill., A. H. Barber & Co. Breckenridge, Chicago, Ill., A. H. Barber & Co. Ithaca, Chicago, Ill., A. H. Barber & Co.

HILLSDALE COUNTY.

Camden Cheese Factory, Somerset Cheese Factory, Camden, Somerset Center, Liberty, Silas Davis, Jr.

ISABELLA COUNTY.

Union Cheese Factory.

Mt. Pleasant,

O. Cramer.

KENT COUNTY.

Kent City Cheese Factory, Sand Lake Cheese Factory,

Kent City,

A. L. Power. Fred Steele.

LAPEER COUNTY.

Columbiaville Cheese Factory, Elba District Dairy Association,

Columbiaville, Saginaw,

Ladd Bros. Wirt Winship.

LENAWEE COUNTY.

Addison Cheese Factory, Bateman Cheese Factory, Green Cheese Factory, Rollin Factory, Tipton Cheese Factory,

Hamburg Cheese Factory,

Remus Cheese Factory.

Nadeau Cheese Factory,

Vogel Cheese Factory,

Addison, Bateman, Sylvania, O., Jasper, Rollin, Tipton, LeBoy H. Smith. W. E. Durfee. C. H. Delano & Son. B. L. Peebles. W. A. Beebe & Son.

LIVINGSTON COUNTY.

Hamburg,

C. G. Switzer.

MECOSTA COUNTY.

Remus,

Phillips & Chapin.

MENOMINEE COUNTY.

Nadeau.

L. Nadeau.

MISSAUKEE COUNTY.

Vogel Center,

Carleton,

Smith & DeVor.

MONROE COUNTY.

Carleton Cheese Factory, Grape Cheese Factory, Lulu Cheese Factory, Maybee Cheese Factory, Whiteford Cheese Factory, Whiteford Cheese Factory,

Carson City Cheese Factory, Greenville Cheese Factory, Stanton Cheese Factory,

Beddow Cheese Factory, Warner's Cheese Factory, Warner's Cheese Factory, Wanner's Cheese Factory, South Lyon Cheese Factory, Warner's Cheese Factory, Walled Lake Cheese Factory, Wixom Cheese Factory, Grape, Lulu, Maybee, Whiteford (village). Whiteford (township). C. M. Strong.
D. A. Jenkins,
Geiger & Smith.
D. A. Jenkins.
W. E. Durfee.
W. E. Durfee.

MONTCALM COUNTY.

Carson City, Greenville, Fenwick, Stanton, H. P. Fitzpatrick. W. W. Eaton. Eaton & Pettit.

OAKLAND COUNTY.

Birmingham, Farmington, Franklin, Novi, South Lyon, Springbrook, Walled Lake, Wixom, J. M. Beddow. Fred M. Warner. Fred M. Warner. Fred M. Warner. H. A. Smith. Fred M. Warner. H. A. Smith. H. A. Smith.

OTTAWA COUNTY.

Zeeland,

S. Brouwers.

Zeeland Cheese Factory,

SAGINAW COUNTY.

Brant Cheese Factory, Frankenmuth Cheese Factory, Cass River Cheese Factory, Frankentrost Cheese Factory, Merrill Cheese Factory, Brant,
Frankenmuth,
Frankenmuth,
Kulmbach, Saginaw,
Merrill, Chicago, Ill.,

T. A. Cook.
L. Hubinger.
Hubinger Bros.
F. C. Moll.
A. H. Barber & Co.

SANILAC COUNTY.

Croswell.

A. L. McAllister.

SHIAWASSEE COUNTY.

Perry Cheese Factory,

Croswell Cheese Factory,

Perry.

Johnson & Love.

TUSCOLA COUNTY.

Warner's Cheese Factory, Silverwood Cheese Factory,

Haven's Cheese Factory,

Gagetown, Mayville, Fred M. Warner. Chas. Reits.

VAN BUREN COUNTY.

Bloomingdale,

E. A. Haven.

WAYNE COUNTY.

Livonia Cheese Factory, Gilt Edge Cheese Factory, Northville Cheese Factory, Power Factory, Warner's Cheese Factory,

Farmington, R. No. 2, Livonia, Farmington, Northville, Plymouth, Ziegeler Bros.
A. B. Smith Co.
Warner & Richardson.
A. D. Power & Son.
Fred M. Warner.

CREAMERIES REGISTERED APRIL 1, 1903.

ALLEGAN COUNTY.

Name.

Allegan Creamery and Cold Storage Co., Bradley Skimming Station,
Burnips Corners Creamery,
Allegan Creamery and Cold Storage
Dorr Creamery Co.,
East Saugatuck Creamery,
Daisy Creamery Co.,
Allegan Creamery and Cold Storage
Hilllards Creamery Co.,
Hilllards Creamery,
Martin Creamery Co.,
Monterey Creamery.
Monterey Creamery.
Hopkins Station,
Martin,
Hopkins Station,
Hopkins Station

Monterey Creamery, Otsego Creamery, Overisel Creamery, Wayland Creamery,

Location and Postoffice addresses.

Hopkins Station,

Otsego, Overisel Wayland.

ANTRIM COUNTY.

Atwood Creamery Co.. Atwood,

Freeport Creamery Co., Hickory Creamery Co., Cold Spring Creamery, Nashville Creamery Co., Prairieville Creamery Co., Woodland Creamery Co., Kawkawlin Creamery Co.,

Buchanan Creamery Co. Galien Creamery Co., Ltd., Glendora Creamery Co., Millburg Creamery Association, Pipestone Jersey Creamery, Three Oaks Creamery Co.,

Albion Creamery Co., Battle Creek Co., Ltd., Litchfield Butter Co., Joppa Creamery Co., Marshall Creamery Co.,

Cassopolis Creamery Co.,

Switzer Creamery.

Looking Glass Creamery, Maple River Creamery, Westphalia Creamery Co.,

Charlotte Creamery, Grand River Creamery, Mulliken Creamery, Sunfield Creamery, Vermontville Creamery Co., Owner or manager.

Owner or manager.
Chas. Kemmer.
Rudell Creamery.
Salem Butter & Cheese Co.
Geo. H. Austin,
E. S. Botsford.
C. J. Lokker & Co
John G. Rutgers.
Chas. Kemmer.
H. E. Parmelee.
H. H. Stroud.
A. C. Monteith.
H. H. Stroud.
C. I. Curry.
John Peters.
Wayland Creamery Co. Wayland Creamery Co.

John Smith.

BARRY COUNTY.

Freeport,
Hickory Corners,
Middleville,
Mashville,
Prairieville,
Woodland,
Kawkawlin, W. Bay

Freeport Creamery Co.
P. H. Lawrence.
W. A. Smith.
M. M. Chase.
B. S. Holly.

BERRIEN COUNTY.

Buchanan,
Galien,
Glendora,
Benton Harbor, B. No. 2,
Three Oaks,

Buchanan Creamery Co.
E. A. Biakeslee.
John Orris.
Sturgeon.
Geo. T. Yetter.
Alman Wright.

CALHOUN COUNTY.

Albion, Battle Creek. Homer, Litchfield, Joppa, Marshall.

E. N. Parsons.
Edward Sanford.
R. G. Washburn, Sec.
E. D. Bushnell, Pres.
Peter Lockwood. Secy.

CASS COUNTY.

Cassopolis,

J. H. Eppley, Secy.

CLARE COUNTY.

Clare.

E. Switzer.

CLINTON COUNTY.

DeWitt, Ovid, Westphalia. Luther W. Sibley.
A. M. Smith & Co.
Anthony P. Arens.

EATON COUNTY.

Charlotte, Eaton Rapids, Mulliken, Sunfield, Vermontville,

Charlotte Creamery Co. A. M. Smith & Co. Geo. E. Potter. Walcott & Preston. D. H. Brown.

Digitized by GOOGLE

GENESEE COUNTY.

Davison Creamery, Baker Sanitary Milk Co., Goodrich Creamery, Gibsonville Altruist Community, Rogersville Skimming Station, Davison, Flint, Goodrich, Grand Blanc, Rogersville, Albert Armstrong.
'T. H. Baker & Son.
W. A. Cook.
S. S. Gibson, Secy.
Wisconsin Butter & Cheese
Co.

GRATIOT COUNTY.

Alma Creamery,

Alma,

L. A. Sharp, Secy.

HIILSDALE COUNTY.

Camden Creamery, Litchfield Butter Co.. Camden, Litchfield, O. D. Chester Est. R. G. Washburn, Secy.

HURON COUNTY.

Lakeside Farm Creamery, Pigeon River Creamery, Ruth Creamery, Soule Creamery Association, Grindstone City, Hayes, Ruth, Soule. Frank Kinch. C. F. Leipprandt. Sebawaing Creamery. F. A. Omick.

INGHAM COUNTY.

Leslie Co-operative Co.,

Leslie, George W. Leach.

IONIA COUNTY.

Hubbardstown Creamery, Lake Odessa Creamery, Orleans Creamery Association, Portland Creamery,

Hubbardstown, Lake Odessa, Orleans, Portland,

M. A. Guild. Roberts Bros. J. M. York. S. M. McKee.

ISABELLA COUNTY.

Isabella County Creamery Co., Shepherd Creamery Co.,

Mt. Pleasant, Shepherd, John McDonaid. H. L. Jones.

JACKSON COUNTY.

Brooklyn Creamery, Jersey Creamery Co., American Condensed Milk Co., Ltd., Parma Butter Co., Brooklyn, Hanover, Jackson, Parma, Thompson Butter Co. T. J. Strait. F. B. Crego. Geo. D. Eggleston.

M. F. Bachelder. F. L. Willison, Secy. F. O. Crossfield. C. H. Barbour. S. W. Kendall. Geo. Glichrist. John Hamilton.

KALAMAZOO COUNTY.

Alamo Valley Creamery Co., Climax Creamery Co., Riverside Creamery, City Creamery, Highland Creamery Association, Schoolcraft Creamery Co., Lotus Creamery, Alamo, Climax, Galesburg, Kalamazoo, Oshtemo, Schoolcraft, Vicksburg,

KENT COUNTY.

Alto Creamery, Byron Center Creamery Co., Boyland Creamery, Budell Creamery, Alto, Byron Center, Grand Rapids, Grand Rapids, W. W. Eaton. A. G. Burwell. J. F. Boyland. C. E. Block.

LAPEER COUNTY.

Burnside Skimming Station, Hadley District Dalry Association, People's Creamery, Otter Lake Creamery, Burnside, Hadley, North Branch, Otter Lake,

LENAWEE COUNTY.

Maple City Creamery, Locust Farm Creamery, Birdsall Creamery, Cadmus Creamery, Clinton Creamery, Holloway Creamery, Hudson Creamery, Tecumseh Creamery,

Adrian, R. No. 1, Tecumseh, Cadmus, Tecumseh, Tecumseh, Hudson, Morenci, Tecumseh, A. E. Piper. Frank T. Hadley. T. Stacey. Wisconsin Butter & Cheese Co.

M. H. Higby.
A. B. Graham.
E. Mott & Co.
L. McLouth & Son.
E. Mott & Co.
E. Mott & Co.
H. E. Loyster.

H. B. Loyster, Chio Dalry Co. E. Mott & Co.

MACOMB COUNTY.

Chesterfield Creamery Association, Cady Skimming Station, Detroit Creamery Co., New Baltimore Creamery Co., New Haven Eligin Creamery Co., Richmond Creamery, Utica Skimming Station. Waldenburg Skimming Station,

Chesterfield. Cady,
Mt. Clemens,
New Baltimore,
New Haven, Richmond. Utica, Waldenburg.

C. T. Jordan, Jr.
Detroit Creamery Co.
W. G. Harry, Treas.
Chris. Schlosser.
F. A. Luttenbacker.
G. M. Grennis. Detroit Creamery Co. Chesterfield Creamery Association.

MANISTEE COUNTY.

Bear Lake Creamery Co., Ltd.,

Bear Lake.

J. L. Bradford.

MENOMINEE COUNTY.

Daggett Creamery, lngalls Co-operative Creamery Co.,

Daggett, Ingalls.

Jno. Dunham. Albert M. Larson.

MONROE COUNTY.

Azalia Creamery,
Dundee Creamery,
Excelsior Creamery Co.,
Milan Creamery,
Monroe Butter and Cheese Factory,
South Rockwood, Butter and Cheese Co.,
Steiner,
Steiner,

Milan Creamery Co. Milan Creamery Co. John S. Knapp. Milan Creamery Co. A. Vivian. A. Vivian. John Strong & Son. Steiner Butter & Fruit Co.

MUSKEGON COUNTY.

Bailey Creamery, Dalton Creamery,

Bailey, Muskegon, J. S. English. E. J. Peterson.

NEWAYGO COUNTY.

Bishop Creamery Co., Crystal Spring Creamery, Grant Skimming Station, Reeman Co-operative Creamery Co., Newaygo, remont, Grant. Reeman.

John Dobbins. 8. Hagadorn. Rudell Creamery. F. W. Reed.

OAKLAND COUNTY.

Clarenceville Creamery,

Oxford Creamery, Royal Oak Skimming Station, Yates Skimming Station,

Clarenceville. Oxford. Royal Oak, Yates,

Towar's Wayne Co. Creamery.
E. L. Bailey.
Detroit Creamery Co.
Detroit Creamery Co.

OCEANA COUNTY.

White River Creamery, Oceana Creamery, Shelby and New Era Creamery Co., Hesperia, Fremont, Montague, Shelby, R. No 2,

S. Hagedorn. Conrad & Fuller. Geo. C. Meyers, Secy.

OSCEOLA COUNTY.

Evart Creamery. Hersey Creamery. Evart. Hersey, Clare, W. Vance. E. Switzer.

OTTAWA COUNTY.

Allendale Creamery,
Bauer Creamery Co.,
Borculo Creamery Co.,
Crisp Creamery Co.,
Crisp Creamery Co.,
Drenthe Co-operative Creamery,
Co-operative Creamery,
Holland Crystal Creamery,
Holland Crystal Creamery Association,
South Ottawa Creamery Co.,

Allendale,
Bauer,
Borculo,
Crisp,
Drenthe,
Coopersville,
Holland,
Ltd., Hudsonville,
Zeeland. Holland,

Mrs. E. C. Pierson. C. Behrens, Pres. H. Koop. W. Nienhuis. Henry Wever. Chas. H. Moore. C. J. Lokker & Co. C. H. Kelley. C. J. Lokker & Co.

SAGINAW COUNTY.

Gera Creamery, Freeland Creamery, Lawndale Skimming Station, Orville Creamery,

Gera Freeland, Lawndale, Saginaw, R. No. 5. Peter C. Mossa. Chas. Dietiker. Ed. Burger. Esra Fry. Mossner.

SANILAC COUNTY.

Brown City Creamery, Melvin Skimming Station. Marlette Creamery.

Brown City, Melvin. Marlette,

A. E. Piper.
A. E. Piper.
A. E. Piper.

1 100

SHIAWASSEE COUNTY.

E. F. Dudley Creamery. Vernon Creamery.

OWARRO. Vernon, E. F. Dudley. P. E. Kirkbam.

ST. CLAIR COUNTY.

St. Clair Creamery Co., Capac Creamery, St. Clair Creamery Co., Yale Creamery.

Avoca. Capac, St. Clair, St. C

J. F. Ruff. A. E. Piper. J. F. Ruff. E. B. Fulle B. Fuller.

ST. JOSEPH COUNTY.

Centerville Creamery Co., Ltd., Mendon Creamery Co., Riverside Butter Co.,

Centerville. Mendon. Three Rivers. R. M. Cauffman. S. Hoch, D. A. Babcock, Jr.

TUSCOLA COUNTY.

Caro Elgin Butter Co. Reese Creamery, Unionville Creamery, Vassar Creamery,

Caro, Reese. Unionville. Vassar,

W. H. Bechtel. Henry Munger. H. G. Spring, Secy. Wm. C. McKenzie.

VAN BUREN COUNTY.

Beriamont Creamery,
Breedsville Creamery,
Decatur Creamery Co.,
Glendale Co-operative Creamery Co.,
Gobleville Creamery Co.,
Lawrence Co-operative Creamery Co.

Berlamont, Breedsville, Decatur, Glendale Gobleville, Lawrence.

Chas. Linton. M. H. Adams.
Martin Knoll.
M. J. Shered.
J. Bishop.
Jesse W. Cobb, Secy.

W SHTENAW COUNTY.

Towar's Wayne County Creamer:

Dexter Creamery, Manchester Creamery, Saline Butter and Cheese Factory, F. J. Fletcher & Co., Ypsilanti Dairy Association, Chelsea, Defroit, Dexter. Manchester,

ery. Amerman Bros. J. A. Lowery.
I. E. Wood.
Chas. S Buthruff.
Ralph Rice. Saline, Ann Arbor, Willis, Ypsilanti, Ypsilanti.

WAYNE COUNTY.

Beech Creamery,

Van Buren Creamery Co., Dearborn Skimming Station, Denton Creamery,

Goldbrook Creamery,
Detroit Creamery Co.,
F. D. Striker Creamery,
1994 Michigan Avenue,
Elm Skimming Station,
Flat Rock Skimming Station,
Inkater Skimming Station,
Inkster Skimming Station,
Inkster Milk Station,
Perrinsville Skimming Station,
Plymouth Creamery Co.,
Preston Skimming Station,
Romulus Creamery, Romulus Creamery.

Sand Hill Creamery.

Stark Skimming Station, 851 Third Ave.,

Beech, Detroit,

Belleville. Dearborn, Denton.

Towars' Wayne Co. Creamery. Geo. E. Quick. Detroit Creamery Co. Towars' Wayne Co. Cream-

Towars' Wayne Co. Cream-

Detroit, 277 Tilman Ave, Joseph Bour.
Detroit, G'd River & Cassw. 8. Harry.
Detroit, 55 Russell St., F. D. Striker.
Detroit, Elim, Detroit Creamery Co.
Flat Rock, Hand, Detroit Creamery Co.
Inkster, Detroit Creamery Co.
Inkster, Detroit Creamery Co.
Thos. Ellis.
Perrinsville, Plymouth, Detroit Creamery Co.
Detroit Creamery Co.
Thos. Ellis.
Detroit Creamery Co.
Thos. Towars' Wayne Co. Creamery.
Towars' Wayne Co. Creamery.

Detroit Stark. Detroit.

ery. Towars' Wayne Co. Creamery.
Detroit Creamery Co.
R. B. Brown.

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1902.	
Cases pending July 1, 1902	29 39 4
CASES DISPOSED OF.	
Before examining magistrates: Defendants bound over to trial courts, Defendants discharged on examination	24
In trial courts:	
Defendants convicted	39 0
Cases pending May 1, 1903	18

PROCEEDINGS HAD DURING THE MONTH OF APRIL.

In the case pending in police court of the city of Bay City, against Max Smith, manager of the Detroit Tea Store, Bay City, charged with selling oleomargarine for butter, defendant on April 13th was discharged.

Complaint was made on April 18th, in justice court of the city of Bay City against the firm of Tanner and Dailey, charged with selling adulterated jelly. On April 27th defendants entered a plea of guilty and a fine of \$25 and costs was imposed by the court.

Complaint was made April 20th in justice court of the City of Saginaw against E. G. Dailey of Detroit, charged with selling adulterated jelly. On April 27th, defendant entered a plea of guilty and a fine of \$25 and costs was imposed by the court.

Complaint was made April 21st in police court of the City of Detroit against Walter H. Williams of the Williams Bros. Co., Detroit, charged with selling imitation jelly, colored.

Complaint was made April 21st in the police court of the city of Detroit against E. A. Charbonneau of the firm of E. A. Charbonneau & Co. Detroit, charged with selling imitation fruit jelly, colored.

Complaint was made April 21st in the police court of the city of Detroit against E. G. Dailey of the firm of The E. G. Dailey Co., charged with selling imitation jelly, colored.

Complaint was made April 23rd in justice court of the city of Lansing against Martin L. Buck of the Sanitary Milk Co., Lansing, charged with selling milk below standard. Defendant pleaded guilty and a fine of \$5 was imposed.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., April 30, 1903.

Hon. A. W. Smith, Dairy and Food Commissioner:

Sir—During the month of April 44 samples of food products have been examined, 13 being pure and 31 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Butter Chocolate and Cocoa Corn Starch Extracts (flavoring) Jely and Fruit Butter Lard Milk "Mixtures or Compounds" Mustard (prepared) Pepper Syrup Vinegar	1 2 1 8 19 1 3 1 1 3 3	1 1 1 2 2 1 1 0 0 0 1 0 3	0 1 0 6 17 0 2 1 1 1 2
Totals.	44	. 18	81

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

COCOA.

No. R.—225. Sample of "Justice Brand Cocoa."	
Sold by Tanner & Dailey, West Bay City, Mich.	
Producer, Wm. H. Baker, Syracuse, N. Y.	
Moisture	4.40 per cent.
Agh	4.54 " "
Total starch	15.32 " "
Fat	28.09 " "
Crude fibre	4.31 " "
Microscopic examination shows the presence of wheat sta	rch.
EXTRACTS.	
No. L.—314. Sample of "Vienna Brand Extract of Vanilla	
Producer, The J. P. Deiter Co., Chicago, Ill.	
Solids	43.80 per cent.
Ash	0.21 " "
Vanillin	0.190 " "
Coumarin	None.
Alcohol, by weight	4.60 " "
Sugar	37.00 " "
Color	Foreign.
	roreign.
Not a pure extract of vanilla.	
Mecosta. Producer, The Bennett Chemical Co., LeRoy, N. Y. Solids Ash Vanillin Coumarin Alcohol, by weight Sugar Color Not an extract of vanilla.	6.63 per cent. 0.14 " " 0.215 " " 0.031 " " 25.00 " " 5.00 " " Foreign.
No. R-216. Sample of "K Brand Extract of Vanilla," fro City. Producer, Phelps, Brace & Co., Detroit, Mich.	om Kelley & Co., Bay
Solids	11.66 per cent.
Ash	0.14 " "
	0.040 " "
Vanillin	
Coumarin	None.
Alcohol, by weight	22.88 " "
Sugar	8.73 "''
Color	Foreign.
Contains foreign coloring matter.	· V. VIBE.
Contains foreign Coloring matter.	

No. R—228. Sample of "Extract of Vanilla and Tonka," fr. Saginaw.	om J. W. C. Pendell,
Solids	9.97 per cent.
Ash Vanillin	0.08 " " 0.028 " "
Coumarin	0.050 " "
Alcohol, by weight	14.94 " "
Sugar	5.52 " "
Color	Foreign.
manufacturer.	name and address of
No. R-229. Sample of "Excelsior Lemon," from J. W. C. I Producer, Excelsior Extract Co., Cleveland, O.	Pendell, Saginaw.
Specific gravity	0.93732
Solids	0.03 per cent.
Alcohol, by weight	40.09 " "
Color	Trace. Yellow coal tar dye.
Contains only a trace of lemon oil.	Tollow coal car dyc.
No. R—238. Sample of "Golden Gate Extract Vanilla," from	n W. E. Laning, Fen-
Producer, C. Elliott & Co., Detroit, Mich.	
Solids	1.40 per cent.
Ash	0.23 " "
Vanillin Coumarin	0.039 " " None.
Alcohol, by weight	17.59 " "
Color	Foreign.
Contains foreign coloring matter.	
JELLY.	
JELLY. No. K—425. Sample of "Currant Flavor Jelly."	
JELLY. No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa.	
JELLY. No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa.	35.62 per cent.
JELLY. No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa.	0.67 " "
JELLY. No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion.	0.67 " " 25.31 " "
JELLY. No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion. Reducing sugar after inversion.	0.67 " " 25.31 " " 47.25 " "
JELLY. No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion	0.67 " " 25.31 " " 47.25 " "
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Preservative	0.67 " " 25.31 " " 47.25 " " -60.8 degrees. -31.9 degrees.
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Preservative Color	0.67 " " 25.31 " " 47.25 " " -60.8 degrees. -31.9 degrees.
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Preservative	0.67 " " 25.31 " " 47.25 " " -60.8 degrees. -31.9 degrees. Benzoic acid.
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Preservative Color	0.67 " " 25.31 " " 47.25 " " -60.8 degrees. -31.9 degrees. Benzoic acid.
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Preservative Color Imitation fruit jelly colored. No. K—426. Sample of "Strawberry Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water	0.67 " " 25.31 " " 47.25 " " -60.8 degrees31.9 degrees. Benzoic acid. Artificial.
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion. Polarization before inversion. Polarization after inversion. Preservative Color Imitation fruit jelly colored. No. K—426. Sample of "Strawberry Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash	0.67 " " 25.31 " " 47.25 " " -60.8 degrees31.9 degrees. Benzoic acid. Artificial. 34.73 per cent. 0.69 " "
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion. Polarization before inversion. Polarization after inversion. Preservative Color Imitation fruit jelly colored. No. K—426. Sample of "Strawberry Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion	0.67 " " 25.31 " " 47.25 " " -60.8 degrees31.9 degrees. Benzolc acid. Artificial. 34.73 per cent. 0.69 " " 24.34 " "
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Preservative Color Imitation fruit jelly colored. No. K—426. Sample of "Strawberry Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion	0.67 " " 25.31 " " 47.25 " " -60.8 degrees31.9 degrees. Benzoic acid. Artificial. 34.73 per cent. 0.69 " " 24.34 " "
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion. Polarization before inversion. Polarization after inversion. Preservative Color Imitation fruit jelly colored. No. K—426. Sample of "Strawberry Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion	0.67 " " 25.31 " " 47.25 " " -60.8 degrees31.9 degrees. Benzoic acid. Artificial. 34.73 per cent. 0.69 " " 24.34 " " 48.44 " " -62.0 degrees.
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion. Polarization before inversion. Preservative Color Imitation fruit jelly colored. No. K—426. Sample of "Strawberry Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Preservative	0.67 " " 25.31 " " 47.25 " " -60.8 degrees31.9 degrees. Benzoic acid. Artificial. 34.73 per cent. 0.69 " " 24.34 " " 48.44 " " -62.0 degrees31.6 degrees. Benzoic acid.
No. K—425. Sample of "Currant Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Preservative Color Imitation fruit jelly colored. No. K—426. Sample of "Strawberry Flavor Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization before inversion	0.67 " " 25.31 " " 47.25 " " -60.8 degrees31.9 degrees. Benzoic acid. Artificial. 34.73 per cent. 0.69 " " 24.34 " " 48.44 " " -62.0 degrees31.6 degrees. Benzoic acid.

No. K—427. Sample of "Grape Flavored Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water	
No. K—428. Sample of "Raspberry Flavored Jelly." Sold by Lutz & Schramm Co., Alleghany, Pa. Producer, Lutz & Schramm Co., Alleghany, Pa. Water	
No. K—429. Sample of "Currant Jelly," from W. E. Heames & Co., Detroit. Sold by W. E. Heames & Co., Detroit, Mich. Producer, Joseph Middleby Jr., Boston, Mass. Water	
No. L—317. Sample of "Standard Brand Currant Flavored Jelly," from A. Caeron, Detroit. Producer, Lutz & Schramm Co., Alle ghany, Pa. Water	0
No. L—318. Sample of "Lemon Pie Filling," from L. Bauman, Detroit. Sold by E. B. Gallagher & Co., Detroit, Mich. Producer, Joseph Middleby Jr., Boston, Mass. Water	

```
No. L-319. Sample of "Current Jelly." from Henry Ruhl. Detroit.
Producer. The Bruce & West Manufacturing Co., Cleveland, O.
  Water ...... 36.27 per cent.
  Ash ..... 0.85 ~
  "
  Reducing sugar after inversion 36.10 " "
Polarization before inversion +107.0 degrees.
  Polarization after inversion......+103.8 degrees.
  Color ..... Artificial.
Imitation fruit jelly colored.
No. R-214. Sample of "Imitation Red Currant Jelly," from Geo. A. Fuller, Bay
Producer, Flaccus Bros., Wheeling, W. Va.
  Water .....
                                       22.63 per cent.
                                        0.62
  Ash .............
                                        37.28 "
                                               ..
  Reducing sugar before inversion.....
                                       39.60 "
                                               ..
  Reducing sugar after inversion.....
  Polarization before inversion.....+134.6 degrees.
  Polarization after inversion......+131.3 degrees.
  Preservative ...... Benzoic acid.
  Color .....
                                       Natural.
An imitation fruit jelly, not properly labeled.
No. R-222. Sample of "Imitation Fruit Flavored Jelly."
Sold by Gustin, Cook & Buckley, Bay City, Mich.
Producer, The E. G. Dailey Co., Detroit, Mich.
  Water .....
                                       27.34 per cent.
                                       0.69 "
30.79 "
  Ash ..........
                                               46
  Reducing sugar before inversion.....
  Polarization before inversion.....+116.4 degrees.
  Polarization after inversion. +113.3 degrees.
Color ...... Artificial.
Imitation fruit jelly colored.
No. R-223. Sample of "Imitation Fruit Jelly."
Sold by Gustin, Cook & Buckley, Bay City, Mich.
Producer, The E. G. Dailey Co., Detroit, Mich.
  Water .....
                                       31.70 per cent.
                                        0.68 "
  Ash ......
                                       33.84 "
  Reducing sugar before inversion.....
  Polarization before inversion......+112.2 degrees.
  Polarization after inversion.....+110.0 degrees.
  Color ...... Artificial.
Imitation fruit jelly colored.
No. R-224. Sample of "Imitation Fruit Flavored Jelly."
Sold by Tanner & Dailey, West Bay City, Mich.
Producer, The E. G. Dailey Co., Detroit, Mich.
   Water
                                       26.65 per cent.
  Ash ...........
                                        0.86
  Reducing sugar before inversion.....
                                       31.57
                                               "
   Reducing sugar after inversion.....
                                       33.76
   Polarization before inversion.....+132.0 degrees.
  Polarization after inversion.....+131.3 degrees.
  Color ..... Artificial.
lmitation fruit jelly colored.
```

```
No. R-226. Sample of "Imitation Strawberry Jelly," from Chas. Gagner, Essex-
 Sold by Symons Bros. Co., Saginaw, E. S. Mich.
 Producer, Chicago Concentrating Co., Chicago, Ill.
    Water ...... 33.05 per cent.
    Ash .....
                                           0.69
    Reducing sugar before inversion.....
                                                   **
                                           33.54
    *
    Polarization before inversion.....+115.6 degrees.
    Polarization after inversion......+115.2 degrees.
    Color ...... Artificial.
 Imitation fruit jelly colored.
 No. R-231. Sample of "Imitation Fruit Jelly."
 Sold by Symons Bios. Co., Saginaw, E. S. Mich.
 Producer. The E. G. Dailey Co., Detroit, Mich.
    Water ...... 28.45 per cent.
    **
    ..
    Polarization before inversion.....+116.0 degrees.
    Polarization after inversion.....+113.3 degrees.
    Color ..... Artificial.
 Imitation fruit jelly colored.
 No. R-232. Sample of "Imitation Fruit Jelly."
 Sold by Tanner & Dailey, West Bay City, Mich.
 Producer, The E. G. Dailey Co., Detroit, Mich.
    Water ..... 34.62 per cent.

      Ash
      •
      0.70
      •

      Reducing sugar before inversion
      32.06
      "

      Reducing sugar after inversion
      32.80
      "

                                           0.70 "
    Polarization before inversion.....+118.4 degrees.
    Polarization after inversion.....+118.0 degrees.
    Color ...... Artificial.
 Imitation fruit jelly colored.
 No. R-235. Sample of "Compound Fruit Jelly." from N. E. Kitchen, Durand,
Mich.
 Producer, Champion Syrup Refining Co., Indianapolis, Ind.
    Water ..... 32.43 per cent.
                                           0.42 "
    Ash .....
    "
    Polarization before inversion.....+123.8 degrees.
    Polarization after inversion.....+121.4 degrees.
             ..... Artificial.
    Color .....
 Imitation fruit jelly colored.
 No. R-236. Sample of "Currant Fruit Jelly" (Empire Brand), from P. C. Fires,
Durand.
 Producer, Berdan & Co., Toledo, O.
    Water ...... 29.63 per cent.
    Reducing sugar before inversion...... 58.05
    Polarization after inversion. 62.40 "

Polarization before inversion. —13.2 degrees.

Polarization after inversion. —23.5 degrees.

Color Artificial.
 Not pure currant jelly.
```

MILK.

No. K-423. Sample of Milk from Mason Hakes, Lansing.			
Sold by Martin L. Buck (Sanitary Milk Co.), Lansing, Mich Specific gravity	1.036		
Total solids	10.34	nor	cent
Fat	1.12	Por	"
Solids not fat	9.22	"	
Ash	0.70	"	"
Skimmed milk.			
No. T-1284. Sample of Milk from H. E. Peters, Benton H	larbor.		
Sold by George Yose, Benton Harbor, Mich.			
Specific gravity	1.028		
Total solids	9.44	per	cent.
Fat	2.25	"	
Solids not fat	7.19 0.56	"	44
Ash	0.50		
Watered mile.			
•			
"MIXTURES OR COMPOUNDS."			
MIXTURES OR COMPOUNDS.			
No. R-213. Sample of "A. B. C. Pie Fruits," from George	A. Fulle	er, E	Bay City.
Producer, The W. H. Marvin Co., Urbana, O.			
Water	23.55		
Ash	1.66	"	44
Sugar	• • • • • •		
Fruit (current and raspberry)	• • • • • •		
Not properly labeled as a mixture or compound.			
· ·			
MUSTARD (Prepared).			
• •			
No. R-227. Sample of "Tomato Mustard," from R. H. Bs	ulley, Sa	agin	aw.
Producer, Flaccus Bros., Wheeling, W. Va.			
Solids	15.78		cent.
Ash	3.62		••
Mustard	• • • • • •		,
Vinegar, salt, etc			
Not properly labeled.	• • • • • •		
and brokend supervet			
PEPPER.			
No. L-313. Sample of Black Pepper, "Capitol Brand,"	from T.	. C.	Holbrook,
Clare.			
Sold by Northrop, Robertson & Carrier, Lansing, Mich.			
Producer, Northrop, Robertson & Carrier, Lansing, Mich.	# 40		
Total ash		per	cent.
Ash insoluble in hydrochloric acid (sand)	2.59 31.69	"	"
Volatile ether extract	0.66	"	44
Non-volatile ether extract	7.44	"	**
Crude fibre	17.49	"	44
Does not comply with the standard for black pepper.	41.10		
power was a common to be property			

No. R—237. Sample of Pepper, "AAA Brand," from Hop Mich.	kins &	Mille	, Durand,
Sold by Symons Bros. Co., Saginaw, E. S. Mich.			
Total ash	6.51	per ·	cent.
Ash insoluble in hydrochloric acid (sand)	0.97		4
Starch	23.74	"	"
Volatile ether extract	1.29	66	46
Non-volatile ether extract	8.65	**	"
Crude fibre			44
Does not comply with standard for black pepper.			

SYRUP.

No. L—316. Sample of Glucose Mixture, from F. E. Standi Sold by Daniel Lynch, Grand Rapids, Mich.	sh, B	lanch	ard.
Water	28.6	0 per	cent.
Ash	3.1	6 "	66
Reducing sugar before inversion	25.6	8 "	**
Reducing sugar after inversion	44.0	6 "	66
Polarization before inversion+	102.6	degr	ees.
Polarization after inversion+	71.6	degr	968.
A glucose mixture not properly labeled.			

INSPECTIONS.

The following places were visited by the department's inspection force

during the month of April:

Arcadian Mine, Battle Creek, Bay City, Benton Harbor, Blanchard, Cadillac, Calumet, Camden, Clayton, Clio, Corunna, Decatur, Detroit, Durand, Edmore, Essexville, Fenton, Flushing, Franklin Mine, Freeport, Fremont, Grape, Hamburg, Hancock, Harrison, Hartford, Hesperia, Houghton, Howell, Hudson, Ida, Lansing, LaSalle, Litchfield, Lucas, Lulu, Mancelona, McBain, Mecosta, Millbrook, Monroe, Morrice, Mt. Morris, Mt. Pleasant, Newaygo, Niles, Petersburg, Reading, Remus, Rodney, Rollin, Saginaw, E. S., South Haven, St. Joseph, Vogel Center, Walled Lake, West Bay City, West Millbrook, White Cloud, Wilcox, Wixom.

Report of dairies inspected during the month of April.

At Benton Harbor:

- G. Franz—Number of cows, 30; condition, extra good and clean; feed, hay, ensilage and bran; stables, good and clean, good light; ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Martindale, Jersey and Durham grades.
- C. and J. Strome—Number of cows. 12; condition, good; feed, hay, bran and middlings; stables, good and clean, good light; ventilation, good; yard, dry and clean, good drainage; water, well and spring. Sells to Martindale, Jersey and Durham grades.

George Youre—Number of cows, 40; condition, good; feed, hay, cornmeal and bran; stables, fairly good and clean; light, fair; ventilation, fair; yard, dry and clean, fair drainage; water. wells. Retails, aerates. Jersey, Durham and Holstein grades.

- J. D. Closson & Son—Number of cows, 14; condition, good and clean; stables, good and extra clean, good light and ventilation; yard, dry and clean, good drainage; water, well, aerates. Sells to H. E. Peters. Jersey and Durham grades.
- B. T. Sells—Number of cows, 13; condition, good; feed, hay; stables, good and clean, good light; ventilation, good; yard, dry and clean, good drainage; water, well. Sells to H. E. Peters. Durham grades.
- S. McCard—Number of cows, 21; condition, good; feed, hay, ensilage, bran and middlings; stables, good and clean, good light; ventilation,

good; yard, dry and clean, good drainage; water, well. Wholesales. Jersey and Durham grades.

H. E. Peters—Retails. Buys milk from B. F. Sells, J. D. Closson and Son, and George Youre.

At Howell:

- L. Pettabone—Number of cows, 20; condition, good; feed, hay, bran. ground corn and oats; stables, good and clean, good light; good ventilation; yard, dry and clean; water, well and spring. Retails, aerates. Jersey and Durham grades.
- G. W. Earl—Number of cows, 18; condition, good; feed, hay, bran and middlings; stables, good and clean, fair light; yard, dry and fairly clean, good drainage; water, well and spring. Retails. Durham grades.

At Monroe:

- E. Seller—Number of cows, 7; condition, good; feed, hay, bran, ground corn and oats; stables, good and fairly clean, fair light, fair ventilation; yard fairly dry and clean, fair drainage; water, well. Sells milk to H. C. Schneurstein. Jersey and Durham grades.
- J. Ruff—Number of cows, 28; condition, good and clean; feed, hay, ground corn and oats, bran and oilmeal; stables, good and clean, fair light, fair ventilation; yard, dry and clean, fair drainage; water, well. Sells to H. C. Schneurstein. Durham and Jersey grades.
- L. Quill—Number of cows, 24; condition, good and clean; feed, hay, bran, oilmeal, ground corn and oats; stables, good and clean, good light, fair ventilation; yard, dry and fairly clean, fair drainage; water, well. Sells to H. C. Schneurstein. Jersey and Durham grades.
- J. Moyer—Number of cows, 12; condition, good; feed, hay, bran, ground corn and oats; stables, good and clean, good light, good ventilation; yard, dry and clean, fair drainage; water, well. Retails, aerates in milk house. Jersey and Durham grades.

At Petersburg:

George Peters and Son—Number of cows, 82; condition, extra good and clean; feed, hay, ensilage and corn; stables, fine, extra neat and clean; fair light, 4 silos, 800 ton capacity; good ventilation; yard, dry and clean, good drainage; water, well. Uses aerator and separator. Retails butter and cream in Toledo. Thoroughbred Jerseys and Jersey grades, a very fine herd.

- O. Gardner—Number of cows, 10; condition, good; feed, hay, stover, ground corn and oats and national food; stables, fair and clean, fair light, fair ventilation; yard, dry and clean, good drainage; water, well. Sells to Euclid Cheese Factory. Jersey and Durham grades.
 - C. Pickens-Number of cows, 12; condition, good; feed, hay, stover

and corn; stables, good and clean, good light; ventilation, good; yard, dry and clean, fair drainage; water, well. Sells to Euclid Cheese Factory.

H. Hanck—Number of cows, 9; condition, good; feed, hay, stover and corn; stables, good and clean; light, good, good ventilation; yard, dry and clean, good drainage; water, well. Sells to Euclid Cheese Factory. Holstein grades.

At Reading:

- C. Allen—Number of cows, 18; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean, fair light; ventilation, fair; yard, dry and clean, good drainage; water, well. Retails. Jersey and Durham grades.
- E. Webster—Number of cows, 20; condition, good; feed, hay, stover, ground wheat and oats; stables, extra good, cement floor, good light, improved system of ventilation; yard, dry and clean, good drainage; water, well. Retails, aerates. Milk house, neat and clean. Durham, Holstein and Jersey grades.

At St. Joseph:

- A. M. Birdsey—Number of cows, 16; condition, good; feed, hay, carrots and mangles; stables, good and clean, good light; ventilation, good; yard, dry and clean, good drainage; water, well. Wholesales. Jersey and Durham grades.
- J. T. Clark—Number of cows, 30; condition, good; feed, hay, ground corn and oats; stables, fair and clean, fair light; good ventilation; yard, dry and clean, good drainage; water, well. Retails. Jersey and Durham grades.

Foster Bros.—Number of cows, 24; condition, good; feed, hay, cornmeal and bran; stables, good and clean and well lighted,good ventilation; yard, dry and clean, good drainage; water, well and spring. Retails. Jersey, Durham, Herefords and Holstein grades.

C. R. Crawford—Number of cows, 42; conditon, good; feed, hay, pasture and bran; stables, good and clean; good light; ventilation, good; yard, dry and clean, fair drainage; water, well. Retails, aerates. Milk house, neat and clean. Holstein, Durham and Jersey grades.

George E. Smith—Number of cows, 40; condition, good; feed, hay, ensilage, bran and middlings; stables, good and clean, good light; ventilation, good; yard, dry and clean, good drainage; water, well and river. Wholesales. Milk house, neat and clean. Holstein, Durham and Jersey grades.

INSPECTION OF CREAMERIES AND CHEESE FACTORIES.

Barry County:

Freeport creamery, Freeport, Mich. F. D. Brayton, manager. Yearly receipts of milk, 7,000,000 lbs. Outfit consists of 4 No. 1 separators. 1 500 gal. receiving vat, 1 375 gal. churn, 1 400 gal. churn, 1 500 gal. cream vat, 1 32 bottle tester, 1 15 H. P. engine, 1 25 H. P. boiler. Condition of building, fair and sanitary; of apparatus, good and clean; of surroundings, good, with good drainage. Average test of milk, 4.2 per cent. Yearly production of butter, 325,000 lbs. Color, medium; salt, medium. Number of patrons, 450. Market, New York.

Hillsdale County:

Litchfield Creamery, Litchfield. Mich. R. G. Washburn, manager. Yearly receipts of milk, 3,366,600 lbs. Outfit consists of 2 separators. 1 400 gal. receiving vat, 1 400 gal. cream vat, 1 300 gal. skim milk vat, 1 450 gal. churn, 1 Ideal skim milk weigher, 1 24 bottle tester, 1 10 H. P. engine, 1 20 H. P. boiler. Condition of building, making improvements. cement floors, drains will be in a first-class sanitary condition; of apparatus, good, clean and neat, latest improved system of cold storage; of surroundings, improving, will be first-class, good drainage. Average test of milk, 4.4 per cent. Yearly production of butter, 159,000 lbs. Color, high; salt, medium. Number of patrons, 200. Market, Philadelphia.

Monroe County:

Excelsior Creamery, Ida, Mich. W. G. Hoffman, manager. Yearly receipts of milk, 1,400,000 lbs.. Outfit consists of 2 No. 1 separators, 1 400 gal. receiving vat, 2 200 gal. cream vats, 1 400 gal. churn, 1 6 H. P. engine, 1 12 H. P. Boiler. Condition of building, good and clean, sanitary in every particular; of apparatus, good, neat and clean; of surroundings, good, with fair drainage. Average test of milk, 3.6 per cent. Yearly production of butter, 66,000 lbs. Color, medium; salt. light. Number of patrons, 100. Market, Toledo.

Schneurstein Milk Depot. Monroe, Mich. H. C. Schneurstein, manager. Yearly receipts of milk, 440,000 lbs. Condition of building, good and sanitary; of apparatus, good; of surroundings, extra good, good drainage. Average test of milk, 3.3 per cent. Retails milk and cream; 3 delivery wagons.

Van Buren County:

Decatur Creamery, Decatur, Mich. Martin Knoll, manager. Yearly receipts of milk, 1,280,000 lbs. Outfit consists of 1 separator, 1 500 gal. receiving vat, 1 400 gal. cream vat, 1 300 gal. churn, 1 24 bottle tester, 1 10 H. P. engine, 1 15 H. P. boiler. Condition of building, good, clean

and sanitary in every part; of apparatus, clean and sweet; of surroundings, good, with fair drainage. Average test of milk, 4.2 per cent. Yearly production of butter, 61,000 lbs. Color. medium; salt, medium. Number of patrons, 100. Market, Philadelphia.

Livingston County:

Michigan Condensed Milk Co., Howell, Mich. Daily receipts of milk, 100,000 lbs. Condition of building, fine, clean and sanitary in every particular; of apparatus, extra clean and thoroughly cleansed each day; of surroundings, good and sanitary, good drainage. Average test of milk, 4.7 per cent. Daily production, 55,000 cans condensed milk. Number of patrons, 900. Market, New York. Has 75 employes. All cans manufactured in factory. Automatic solderer, labeler, filler and sealer. No milk received that is below 3.0 per cent. Factory and outfit up to date in every particular.

Berrien County:

Niles Cheese Factory, Niles, Mich. F. Tranger, manager. M. H. Stephenson, cheese-maker. Yearly receipts of milk, 600,000 lbs. Outfit consists of 1 600 gal. cheese vat, 1 12 hoop gang press, 1 12 bottle tester, 1 15 H. P. boiler. Condition of building, good, clean and sanitary in every particular; of apparatus, good and clean; of surroundings, good, with extra good drainage. Average test of milk, 4.2 per cent. Yearly production of cheese, 63,000 lbs. Number of patrons, 20. Market, home.

Hillsdale County:

Bennett Cheese Factory, Hudson, Mich. O. F. Foster, owner. M. M. Hinckley, cheese-maker. Yearly receipts of milk, 3,295,000 lbs. Outfit consists of 3 cheese vats, 1 curd sink, 1 40 hoop gang press, 1 6 H. P. boiler. Condition of building, good, in a fine sanitary condition; of apparatus, good and clean in every particular; of surroundings, good and sanitary, with good drainage. Average test of milk, 4.0 per cent. Yearly production of cheese, 173,000 lbs. Brand, Michigan Full Cream Cheese. Number of patrons, 150. Market, Illinois.

Camden Cheese and Butter Factory, Camden, Mich. F. M. Smith, manager. Yearly receipts of milk, 1,095,000 lbs. Outfit consists of 2 separators, 2 500 gal. cheese vats, 1 curd sink, 1 22 hoop gang press, 1 300 gal. churn. 1 24 bottle tester, 1 butter worker, 1 8 H. P. engine, 1 12 H. P. boiler. Condition of building, good, clean and sanitary, water from spring; of apparatus, good and clean; of surroundings, good, with good drainage. Average test of milk, 4.1 per cent. Yearly production of cheese, 115,000 lbs. Number of patrons, 40. Market, Indiana. Creamery is not running.

Lenawee County:

Hudson Cheese Factory, Hudson, Mich. D. W. Rhead, owner. Yearly receipts of milk, 1,250,000 lbs. Outfit consists of 3 300 gal. cheese vats, 1 33 hoop gang press, 1 curd sink, 1 4 H. P. boiler. Condition of building, fair, and fairly clean, will improve soon; of apparatus, good and

clean, all in a fair sanitary condition; of surroundings, fair, with good drainage. Yearly production of cheese, 131,000 lbs. Number of patrons, 80. Market, Indiana.

Livingston County:

Hamburg Cheese Factory, Hamburg, Mich. C. G. Switzer, manager. Outfit consists of 2,500 gal. cheese vats, 1 curd sink, 1 20 hoop gang press, 1 8 H. P. boiler, 1 12 bottle tester. Condition of building, good, clean and sanitary; of apparatus, good and clean; of surroundings, good, with good drainage. Expects to start factory May 5, 1903.

Monroe County:

Grape Cheese Factory, Grape, Mich. D. A. Jenkins, owner. Yearly receipts of milk, 1,277,000 lbs. Outfit consists of 2 cheese vats, 1000 gal. capacity, 1 20 hoop gang press, 1 curd sink, 1 24 bottle tester, 1 6 H. P. boiler. Condition of building, good, clean and sanitary; of apparatus, good and clean; of surroundings, clean, dry; drainage, good. Average test of milk, 3.6 per cent. Yearly production of cheese, 141,000 lbs. Number of patrons, 50. Market, Toledo.

Monroe Butter and Cheese Co., Monroe, Mich. J. C. Sterling manager. Yearly receipts of milk, 2,900,000 lbs. Outfit consists of 2 No. 1 separators, 1 400 gal. receiving vat, 1 375 gal. churn, 1 300 gal. cream vat, 1 butter print, 1 32 bottle tester, 1 6 H. P. engine, 1 12 H. P. boiler. Condition of building, clean and sanitary in every particular; of apparatus, clean and neat; of surroundings, good, with good drainage. Average test of milk, 3.4 per cent. Yearly production of butter, 132,000 lbs. Color, medium; salt, medium. Market, home.

Lulu Cheese factory, Lulu, Mich. Geiger and Smith, managers. Yearly receipts of milk, 1,000,000 lbs. Outfit consists of 1 900 gal. cheese vat, 1 curd sink, 1 12 bottle tester, 1 curd mill, 1 10 H. P. boiler. Condition of building, good, sanitary in every particular; of apparatus, good and clean; of surroundings, good, with fair drainage. Average test of milk, 3.6 per cent. Yearly production of cheese, 90,000 lbs. Number of patrons, 50. Market, home.

LaSalle Cheese Factory, LaSalle, Mich. C. E. Kirby, owner. Yearly receipts of milk, 900,000 lbs. Outfit consists of 2 500 gal. cheese vats, 1 curd sink, 1 14 hoop gang press, 1 10 bottle tester, 1 10 H. P. boiler. Condition of building, good and clean, fine sanitary condition; of apparatus, good and clean, nicely arranged; of surroundings, good, fair drainage. Average test of milk, 3.4 per cent. Yearly production of cheese, 90,000 lbs. Number of patrons, 36. Market, home.

Euclid Cheese Factory, Petersburg, Mich. O. T. Rose, Secretary, D. E. Barker, cheese-maker. Yearly receipts of milk, 550,000 lbs. Outlit consists of 1 500 gal. cheese vat, 1 curd sink, 1 18 hoop gang press, 1 8 H. P. boiler. Condition of building, good and clean, sanitary in every

particular; of apparatus, good, clean and neat; of surroundings, good, with good drainage. Yearly production of cheese, 56,000 lbs. Makes a high grade of cheese. Number of patrons, 40. Market, home.

Oakland County:

South Lyon Cheese Factory, South Lyon, Mich., H. A. Smith, owner. Daily receipts of milk, 3,000 lbs., capacity, 10,000 lbs. Outfit consists of 1-700 gallon cheese vat, 1-200 gallon cheese vat, 1-curd sink, 1-20 hoop gang press, 1-8 H. P. boiler. Condition of building, extra good, clean and sanitary in every particular; of apparatus, good and clean; of surroundings, good, with fair drainage. Average test of milk, 3.5 per cent. Daily production of cheese, 300 lbs. Number of patrons, 30. Market, home.

Walled Lake Cheese Factory, Walled Lake, Mich., H. A. Smith, owner; W. Allen, cheese-maker. Yearly receipts of milk. 900,000 lbs. Outfit consists of 1-600 gallon cheese vat, 1-curd sink, 6 H. P. boiler. Condition of building, good, clean and sanitary; of apparatus, good and clean; of surroundings, good, with fair drainage. Average test of milk 3.6 per cent. Yearly production of cheese, 90,000 lbs. Number of patrons, 28. Market, home.

Wixom Cheese Factory, Wixom, Mich., H. A. Smith, owner. Yearly receipts of milk, 2,190,000 lbs. Outfit consists of 1 800 gal. cheese vat, 1 400 gal. cheese vat, 1 curd sink, 1 24 hoop gang press, 1 6 H. P. boiler, 1 12 bottle tester. Milk from South Lyon and Walled Lake cheese factories tested at Wixom factory. Condition of building, good, clean and sanitary in every part; of apparatus, neat and clean; of surroundings, good and sanitary, good drainage. Average test of milk, 3.6 per cent. Yearly production of cheese, 220,000 lbs. Number of patrons, 42. Market, home.

Van Buren County:

Hartford Cheese Factory, Hartford, Mich., S. M. Carpp, owner. Yearly receipts of milk, 1,000,000 lbs. Outfit consists of 1 500 gal. cheese vat, 1 curd sink, 1 12 hoop gang press, 1 32 bottle tester, 1 12 H. P. boiler. Condition of building, good, clean and sanitary in every part; of apparatus, good and clean; of surroundings, good, with good drainage. Average test of milk 4.5 per cent. Yearly production of cheese, 110,000 lbs. Number of patrons, 50. Market, home. Buys milk by Babcock test.

APIARY INSPECTION.

At Battle Creek:

John I. Gibbons—Number of colonies, 32; colonies, some healthy, some diseased, one dead with foul brood; yard, clean; honey house, neat and clean; flora, white clover. Bees were bought last September. No knowledge of disease. Seller will take back the bees and treat them.

At Clayton:

S. A. Lawton—Number of colonies, 10; colonies, healthy; yard, fair; flora, clover.

At Detroit:

Earl F. Townsend—Number of colonies, 40; colonies, healthy; yard, dirty; flora, sweet and white clover. He had mistaken chilled brood for foul brood.

At Morris:

W. H. Kirker-Number of colonies, 70; colonies, healthy; yard, clean and attractive; honey house, neat and clean; flora, clover.

At Rollin:

G. D. Peebles—Number of colonies, 3; colonies, badly diseased; yard, fair; flora, basswood and clover. Burned hives and combs.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;

2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;

3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it:

4. If it is in imitation of, or is sold under the name of another article;

5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal:

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;-

If it contains any added substance or ingredient which is poisonous

or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof:

They must contain nothing injurious to health;

They must not be sold in imitation of, or under the name of another article:

They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture

or compound:

A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound. coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar,

phosphate powder, etc., must be true to name.

BUCKWHEAT FLOUR.—If labeled, "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

BUTTER.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the De-

partment on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter. CANDY.-Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health. CATSUP.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

CHEESE.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cream is purchased of or contributed by three or more persons must register with the Depart ment, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

COFFEE.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

Correct Substitute.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

CHOCOLATES AND COCOAS.—If containing no other substances than cocoa mass

sugar and flavoring will not be classed as a compound or mixture.

Canned Goods.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica

CREAM OF TARTAR.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

EXTRACTS, FLAVORING.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extract of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

FARINACIDOUS GOODS.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear

the name and address of the manufacturer or compounder thereof.

Honey.—Must be pure. Cannot be mixed with glucose or other substances and sold as "Honey Compound."

JELLY.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

LARD.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-haif inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquors.—Spirituous, fermented, or malt liquors must not contain drugs or poisons or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquors from any barrel, cask or vessel, unless the same shall have been branded and marked as aforemid.

MAPLE SUGAR AND MAPLE SYRUP.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple

Syrup Compound."

MILK.—Must contain not less than 3 per cent fat and 121/2 per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased, or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any sub-

Digitized by GOOGLE

stance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives to milk is prohibited.

Molasses.—Must be branded with its true and appropriate name and must be

true to same. (See Syrup.)

OLEOMABGARINE.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where eleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words "Oleomargarine Sold or Used Here," printed in black ink in plan Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where eleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica

in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrapped for sale.

Oleomargarine must not contain artificial coloring matter.

PANCARE FLOURS.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and

address of the manufacturer or compounder.

PRPPEZ.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

PREPARED MUSTARD.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard" and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

Process Butter.—All packages containing same sold, offered or exposed for sale,

or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed

in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them

plain and prominent.

STEUPS.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture" and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures

shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

SPICES.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though

the package be labeled mixture or compound. (See pepper.)

VINEGAR.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT.



BY AUTHORITY

LANSING MICHIGAN

BOBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS

1908

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

A. W. SMITH, -	_	-	-	-	-	- Co	OMMISSIONE
PERLEY C. HEALD,		-	-	-	-	DEPUTY C	MMISSIONE
B E DOOLITTLE	_	_	_	_	_	- Sma	TEV.TATA

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1902.

Cases commenced since sa	02id date	39
cases none prossed		···· •
	CASES DISPOSED OF.	•
Before examining magistra	tes:	
	to trial courts	
	on examination	7
In trial courts:		
Defendants convicted.	• • • • • • • • • • • • • • • • • • • •	
	•••••••••••••	
Cases pending June 1, 1903.		16

PROCEEDINGS HAD DURING THE MONTH OF MAY.

In the case pending in the police court of the city of Detroit, against Walter H. Williams of the Williams Bros. Co., charged with selling imitation jelly, colored, defendant on May 8th waived examination and was bound over to the recorder's court for the city of Detroit for trial.

In the case pending for re-trial in the circuit court for the county of Muskegon against Chas. W. Jennings, charged with selling adulterated extract of lemon, defendant on May 11th entered a plea of guilty and a fine of \$100 was imposed by the court.

In the case pending in the circuit court for the county of Berrien, against Charles Freund of St. Joseph, charged with selling colored oleomargarine, defendant entered a plea of guilty and a fine of \$50 and costs was imposed by the court, \$49 of which was admitted.

In the case pending in the circuit court for the county of Berrien, against Charles D. Hirsch of Benton Harbor, charged with selling colored

oleomargarine, defendant on May 22nd entered a plea of guilty and a fine of \$50 and costs was imposed by the court, \$49 of which was remitted.

In the case pending in the police court of the city of Detroit, against E. A. Charbonneau of the firm of E. A. Charbonneau and Co., charged with selling imitation fruit jelly, colored, defendant on May 22nd waived examination and was bound over to the recorder's court for the city of Detroit for trial.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., May 31, 1903.

Hon. A. W. Smith, Dairy and Food Commissioner:

Sir—During the month of May 52 samples of food products have been examined, 13 being pure and 39 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Allspice. Chocolate and Cocoa. Cinnamon Cloves Coffee Extracts (flavoring) Ginger Jelly, jam and preserves Milk Mittures or Compounds" Molasses Mustard (dry) Mustard (prepared) Oleomargarine Pepper. Vinegar	1 5 1 1 1 12 16 8 4 1 2 1 1	1 8 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	11 11 14 4 1
. Totals	52	13	38

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the Department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the Department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

CHOCOLATE AND COCOA.

No. K—434. Sample of "Justice Brand Cocoa" from George Hume & Co., kegon. Sold by George Hume & Co., Muskegon, Mich: Producer, Wm. H. Baker, Syracuse, New York.	Mus-
Moisture 3.06 per cent. Ash 5.03 " " Starch 6.50 " " Fat 32.80 " " Crude fibre 4.51 " "	
Microscopic examination shows a trace of wheat starch. No. S—307. Sample of "Justice Brand Cocoa" from Edward Henkel Co., De Producer, William H. Baker & Co., Syracuse, N. Y.	troit.
Moisture 2.89 per cent.	
Ash 4.99 " " Starch 7.46 " " Fat 31.96 " " Crude fibre 4.67 " "	
Starch 7.46 " " Fat	
Asn 4.99 Starch 7.46 " " Fat 31.96 " " Crude fibre 4.67 " "	

No. L-321. Sample of "Leader Coffee" from Packard a	nd Schepers, McBain.
Producer, Woolson Spice Co., Toledo, Ohio.	•
Total ash	

Microscopic examination shows sample to consist of broken coffee berries, sticks, pieces of husks, charred and immature berries, etc.

EXTRACTS.

No. L —337. Sample of "Pure Concentrated Extract of Vanilla" from Roofstra and Elzenga, Atwood.

Sold by Loverin and Browne Co., Chicago, Ill.

Solids	12.14 per	cent.
Ash		"
Vanillin	0.10 "	**
Coumarin	None.	
Alcohol, by weight	32.86 "	**
Sugar	0.72	"
Color	Foreign.	

Contains foreign coloring matter.

No. L —338. Sample of "Pure Concentrated Extract of I and Elzenga, Atwood. Sold by Loverin and Browne Co., Chicago, Ill.	emon" from Roofstra
Specific gravity. Solids Alcohol, by weight Lemon Oil Color, artificial	0.05 per cent. 41.68 " " Trace.
Contains only a trace of lemon oil.	
No. R—240. Sample of "Pure Flavoring Extract Stra Monroe, Howell. Producer, Bertlow Chemical Co., Detroit, Mich.	wberry" from H. W.
Solids	1.97 per cent.
Sugar	
Compound ethers	
Alcohol	
An artificial preparation. Not salable as an extract.	
Au artificial preparation. Not salable as an extract.	•
No. R —241. Sample of "Elite Brand Extract Raspberry" Howell.	from H. W. Monroe,
Producer, Lambert and Lowman, Detroit, Mich.	
Solids	0.08 per cent.
Compound ethers	
Coloring matter	
An artificial preparation. Not salable as an extract.	
No. U—62. Sample of "Flavoring Extract, Artificial Strategy and Aronson Co., Norway. Sold by Joannes Bros. Co., Green Bay, Wisconsin. Producer, Joannes Bros. Co., Green Bay, Wisconsin.	awberry" from Sod er -
Solids	11.85 per cent.
Glycerine	
Compound ethers	
Alcohol	
An artificial preparation. Not salable as an extract.	
within proporation. Not saigule as an extract.	
No. U —63. Sample of "Artificial Strawberry" from Soderi	perg and Aronson Co.,
Sold by A. J. Hilbert & Co., Milwaukee, Wisconsin. Producer, A. J. Hilbert & Co., Milwaukee, Wisconsin.	
Solids	5.51 per cent.
Glycerine	—— per cent.
Compound ethers	
Alcohol	
Coloring matter	
No. U -64. Sample of "Artificial Pineapple" from Soderb Norway.	erg and Aronson Co.,
Sold by A. J. Hilbert & Co., Milwaukee, Wisconsin.	
Producer, A. J. Hilbert & Co., Milwaukee, Wisconsin.	
Solids	0.03 per cent.
Compound ethers	
Coloring matter	
An artificial preparation. Not salable as an extract	

No. U —65. Sample of "Artificial Raspberry" from Soderb Norway.	erg and Aronson Co.,
Sold by A. J. Hilbert & Co., Milwaukee, Wisconsin. Producer, A. J. Hilbert & Co., Milwaukee, Wisconsin.	
Solids	1.16 per cent.
Compound ethers	
Coloring matter	
No. U -66. Sample of "Extract Artificial Strawberry" (M	Ionarch Brand), from
A. T. Sethney, Norway. Sold by Reid, Murdock & Co., Chicago, Ill. Producer, Reid, Murdock & Co., Chicago, Ill.	
Solids	0.04 per cent.
Alcohol Coloring matter	
An artificial preparation. Not salable as an extract.	
No. U—75. Sample of "Artificial Flavoring Extract of Mercantile Co., Crystal Falls. Sold by Joannes Bros. Co., Green Bay, Wisconsin. Producer, Joannes Bros. Co., Green Bay, Wisconsin.	Banana" from Parks
Solids	1.75 per cent.
Glycerine Compound ethers	
Alcohol	
An artificial preparation. Not salable as an extract.	
No. U —76. Sample of "Jennings' Double Concentrated Marks Mercantile Co., Crystal Falls. Sold by Jennings' Flavoring Extract Co., Grand Rapids, Mercant Producer, Jennings' Flavoring Extract Co., Grand Rapids,	lich.
Specific gravitySolids	0.95647 0.06 " "
Alcohol, by weight	30.60 " "
Color artificial	Yellow Coal Tar Dye.
Contains no lemon oil.	
GINGER.	
No. L-335. Sample of "Strictly Pure Ginger" from R	coofstra and Elzenga,
Sold by Loverin and Browne Co., Chicago, Ill.	
Ash	3.31 per cent. 10.22 " " 56.86 " "
Total starchNon-volatile ether extract	3.10 " "

Crude fibre.....

Microscopic examination shows the presence of corn meal and cayenne.

-3.10 1.38

DAIRY AND FOOD DEPARTMENT.

JELLY.

No. K —430. Sample of "New England Fruit Jelly" from 1 Sold by Chapman & Smith Co., Chicago, Ill. Producer, Chapman & Smith Co., Chicago, Ill.	E. O. Quinn, Lansing.
Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Nonvolatile ether extract Color	44.51 " " -80.0 degrees. 3.10 " "
Imitation fruit jelly colored.	
No. K—431. Sample of "New England Fruit Jelly" from I Sold by Chapman & Smith Co., Chicago, Ill. Producer, Chapman & Smith Ço., Chicago, Ill.	E. O. Quinn, Lansing.
Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Color	0.40 " " 22.30 " " 45.00 " " -80.0 degrees. -46.2 "
Imitation fruit jelly colored.	
No. L—326. Sample of "Quince Jelly" (Monarch Brand) fro Cadillac. Sold by Reid, Murdock & Co., Chicago, Ill.	om Johnson & Kaiser,
Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Color	0.32 " " 26.71 " " 67.20 " " 130.0 degrees23.7 "
Artificially colored.	III timolati
No. L-327. Sample of "Grape Jelly (Monarch Brand) from Cadillac.	n Johnson and Kaiser,
Sold by Reid, Murdock & Co., Chicago, Ill. Water Ash Reducing sugar before inversion Reducing sugar after inversion. Polarization before inversion. Polarization after inversion. Color	0.26 " " 40.96 " " 65.52 " " -12.4 degrees.
Artificially colored.	
No. L—328. Sample of "Raspberry Jelly" (Monarch Bran Kaiser, Cadillac. Sold by Reid, Murdock & Co., Chicago, Ill.	
Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Color Artificially colored.	0.34 " " .53.50 " " 64.41 " " —5.0 degrees. –22.0 "
2	Digitized by GOOGL

No. 1 200 Cample of (Ctuambanus Tally) (Manage Dec	md) form Tohmen and
No. L—329. Sample of "Strawberry Jelly" (Monarch Bra Kaiser, Cadillac. Sold by Reid, Murdock & Co., Chicago, Ill.	nd) from Johnson and
	00 04
Water	
Ash	
Reducing sugar before inversion	. 34.00
Reducing sugar after inversion	03.80
Polarization before inversion	-4.8 degrees.
Polarization after inversion	
Artificially colored.	Al tinciai.
,	
No. R-243. Sample of "Belle Isle Brand Imitation Fr	uit Jelly" from C. E.
Marston, Howell.	
Producer, E. A. Charbonneau & Co., Detroit, Mich.	
. Water	40 53 per cent
•	
Reducing sugar before inversion	
Reducing sugar after inversion	91.90
Polarization before inversion	
Polarization after inversion	
Color	Artificial.
Imitation fruit jelly colored.	
No. S.—304. Sample of "Pure Currant Jelly' from T. J. K Producer, The American Preserve Co., Philadelphia, Pa.	Iline, Detroit.
Water	26.59 per cent.
Ash	9.00 99.94 " "
Reducing sugar before inversion	33.44
Reducing sugar after inversion	09.44
Polarization before inversion	
Polarization after inversion	
Polarization after inversion	-22.0 "
	-22.0 " Artificial.
Color	-22.0 " Artificial.
Color Preservative Not a pure currant jelly.	-22.0 " Artificial. Benzoic acid.
Color Preservative Not a pure currant jelly.	-22.0 " Artificial. Benzoic acid.
Color	-22.0 " Artificial. Benzoic acid.
Color	-22.0 " Artificial. Benzoic acid.
Color	-22.0 " Artificial. Benzoic acid.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich.	-22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water	-22.0 Artificial. Benzoic acid. John Swanson, Iron 32.49 per cent.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash	-22.0 "Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " "
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion.	-22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " "
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion. Reducing sugar after inversion.	22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " 37.10 " " 37.97 " "
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion.	22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " 37.10 " " 37.97 " "
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion. Reducing sugar after inversion. Polarization before inversion.	22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 114.8 degrees.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion. Reducing sugar after inversion. Polarization before inversion. Polarization after inversion.	-22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion. Reducing sugar after inversion. Polarization before inversion. Polarization after inversion. + Polarization after inversion. - Color	-22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion. Reducing sugar after inversion. Polarization before inversion. Polarization after inversion.	-22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Imitation fruit jelly colored.	-22.0 "Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees115.2 " Artificial.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Tolor Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly	-22.0 "Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees115.2 " Artificial.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Color Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly Sundstrom, Iron Mountain.	-22.0 "Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees115.2 " Artificial.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Reducing sugar after inversion. Polarization before inversion. Polarization after inversion. Color Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly Sundstrom, Iron Mountain. Sold by Joannes Bros. & Co., Green Bay, Wisconsin.	22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees. 115.2 " Artificial.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Color Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly Sundstrom, Iron Mountain.	22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees. 115.2 " Artificial.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Reducing sugar after inversion. Polarization before inversion. Polarization after inversion. Color Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly Sundstrom, Iron Mountain. Sold by Joannes Bros. & Co., Green Bay, Wisconsin. Producer, The West Virginia Preserving Co., Wheeling, V	22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " 37.10 " 37.97 " 114.8 degrees. 115.2 " Artificial. 7 from Anderson and
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Reducing sugar after inversion. Polarization before inversion. Polarization after inversion. Color Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly Sundstrom, Iron Mountain. Sold by Joannes Bros. & Co., Green Bay, Wisconsin. Producer, The West Virginia Preserving Co., Wheeling, V	-22.0 " Artificial. Benzoic acid. 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " -114.8 degrees115.2 " Artificial. " from Anderson and V. Va. 32.77 per cent.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion	-22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 114.8 degrees. 115.2 " Artificial. 7 from Anderson and V. Va. 32.77 per cent. 0.61 " "
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Holarization after inversion Color Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly Sundstrom, Iron Mountain. Sold by Joannes Bros. & Co., Green Bay, Wisconsin. Producer, The West Virginia Preserving Co., Wheeling, V Water Ash Reducing sugar before inversion.	-22.0 "Artificial. Benzoic acid. 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees115.2 " Artificial. 7" from Anderson and V. Va. 32.77 per cent. 0.61 " " 32.17 " "
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion Polarization after inversion Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly Sundstrom, Iron Mountain. Sold by Joannes Bros. & Co., Green Bay, Wisconsin. Producer, The West Virginia Preserving Co., Wheeling, V Water Ash Reducing sugar before inversion. Reducing sugar after inversion.	-22.0 " Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees. 115.2 " Artificial. 7 from Anderson and V. Va. 32.77 per cent. 0.61 " " 32.17 " " 33.87 " "
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Polarization before inversion Polarization before inversion Polarization after inversion Color Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly Sundstrom, Iron Mountain. Sold by Joannes Bros. & Co., Green Bay, Wisconsin. Producer, The West Virginia Preserving Co., Wheeling, V Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion	-22.0 "Artificial. Benzoic acid. 1 John Swanson, Iron 32.49 per cent. 0.81 "" 37.10 "" 37.97 "" 114.8 degrees. 115.2 " Artificial. 7 from Anderson and V. Va. 32.77 per cent. 0.61 "" 32.17 "" 33.87 "" +113.3 degrees.
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion. Reducing sugar after inversion. Polarization before inversion. Polarization after inversion. Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly Sundstrom, Iron Mountain. Sold by Joannes Bros. & Co., Green Bay, Wisconsin. Producer, The West Virginia Preserving Co., Wheeling, V Water Ash Reducing sugar after inversion. Reducing sugar after inversion. Polarization before inversion. Polarization after inversion.	22.0 " Artificial. Benzoic acid. 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees. 115.2 " Artificial. 7" from Anderson and V. Va. 32.77 per cent. 0.61 " " 32.17 " " 33.87 " " +113.3 degrees. +112.4 "
Color Preservative Not a pure currant jelly. No. U—68. Sample of "Blackberry Flavored Jelly" from Mountain. Sold by Williams Bros. & Co., Detroit Mich. Producer, Williams Bros. & Co., Detroit, Mich. Water Ash Reducing sugar before inversion Polarization before inversion Polarization before inversion Polarization after inversion Color Imitation fruit jelly colored. No. U—69. Sample of "Fort Henry Brand Currant Jelly Sundstrom, Iron Mountain. Sold by Joannes Bros. & Co., Green Bay, Wisconsin. Producer, The West Virginia Preserving Co., Wheeling, V Water Ash Reducing sugar before inversion Reducing sugar after inversion Polarization before inversion	22.0 " Artificial. Benzoic acid. 32.49 per cent. 0.81 " " 37.10 " " 37.97 " " 114.8 degrees. 115.2 " Artificial. 7" from Anderson and V. Va. 32.77 per cent. 0.61 " " 32.17 " " 33.87 " " +113.3 degrees. +112.4 "

Imitation fruit jelly colored.

No. U-71. Sample of "Maple Leaf Compound Strawbo Mitchell & Co., Iron Mountain.	erry P	reserves"	from
Sold by The Williams Bros. & Co., Detroit, Mich. Producer, The Williams Bros. & Co., Detroit, Mich.			
Total solids	70.62	per cent.	
Insoluble solids	0.51	 	
Ash Reducing sugar before inversion	0.56 40.46	-64 66	
Reducing sugar after inversion	45.70	"	
Polarization before inversion Polarization after inversion		degrees.	
Fruit (strawberries)	Small		
Color	Artific	ial.	
Imitation fruit preserves colored.			
No. U-72. Sample of "Strawberry Jelly" from M. Levi & Sold by Sprague, Warner & Co., Chicago, Ill. Producer, Sprague, Warner & Co., Chicago, Ill.	& Co.,	Iron Mou	ntain.
Water		per cent.	,
Ash	0.51 28.85	44 44 44 44	
Reducing sugar after inversion	62.29	u u	
Polarization before inversion	-28.6	degrees.	
Polarization after inversion		al.	
Not pure strawberry jelly.			
No. U. 74. Sample of "Eagle Jams, Strawberry" from Fincantile Co., Crystal Falls. Sold by Puhl, Webb & Co., Chicago, Ill. Producer, Anderson Food Co., New Jersey.			
Total solidsInsoluble solids	68.18 0.23	per cent.)
Ash	0.54	"	
Reducing sugar before inversion	31.09 32.69	11 11 11 14	
Polarization before inversion+	125.2	degrees.	
Polarization after inversion+: Fruits (strawberries)	120.1	" ~~~~	
Color			
An imitation fruit jam colored.			
No. U—77. Sample of "Strawberry Jelly" from A. T. Sethi Sold by Sprague, Warner & Co., Chicago, Ill. Producer, Sprague, Warner & Co., Chicago, Ill.	ney, No	rway.	•
Water		per cent.	
Ash	0.72 44.64	ee ce	
Reducing sugar after inversion		4 4	
Polarization before inversion		degrees.	
	Natura	1.	•
Not pure strawberry jelly.			
MILK.			
No. L-322. Sample of milk from S. E. McCool, Cadillac.			
Specific gravity	1.032		
SolidsFat	11.94 ; 3.10	per cent.	
Solids not fat	8.84	44 46	٠.
Ash	0.74	"	-
Below the standard in solids.			1

No. L-324. Sample of milk from Thomas Alexander, Cad	lillac
Fat Solids not fat Ash	1.031 11.73 per cent. 3.41 " " 8.32 " " 0.78 " "
Below the standard in solids.	
MIXTURES OR COMPOUNDS.	
No. R—244. Sample of "Pien-Art" from C. L. Cook & Sor Producer, Foote and Jenks, Jackson, Mich.	n, Howell.
Solids Compound ethers Alcohol Coloring matter. Not properly labeled as a mixture or compound.	0.10 per cent.
No. R—245. Sample of "Stra-Bart" from C. L. Cook & Son, Producer, Foote and Jenks, Jackson, Mich.	Howell.
Solids Compound ethers Alcohol Coloring matter	0.13 per cent.
Not properly labeled as a mixture or compound.	
No. R-246. Sample of "Ban-Art" from C. L. Cook & Son, Producer. Foote and Jenks, Jackson, Mich.	Howell.
Solids Sugar Compound ethers Alcohol Coloring matter	0.63 per cent. /
Not properly labeled as a mixture or compound.	•
No. U—67. Sample of "Imperial Double Concentrated Ex. A. J. DeRoeck, Norway. Sold by Smith Thorndike and Brown Co., Marinette, Wisc Producer, Smith, Thorndike and Brown Co., Marinette, V.	eonsin. Wisconsin.
Solids Compound ethers Alcohol Coloring matter	0.12 per cent.
Not properly labeled as a mixture or compound.	
MUSTARD.	
No. L-325. Sample of mustard from F. E. Sissons, Centr	al Lake.
Ash Starch Mustard Turmeric	5.74 per cent.
Colored with turmeric.	_

OLEOMARGARINE.

No. L-320. Sample of oleomargarine from dining room of American House, Cadillac, Chas. Barton, proprietor.

 Refractive Index at 25°C.
 1.4646

 Reichert-Meissl No.
 1.24

Oleomargarine. No signs displayed in dining room.

PEPPER.

No. L-333. Sample of "Strictly Pure Black Pepper" from Roofstra and Elzenga, Atwood.

Sold by Loverin and Browne Co., Chicago, Ill.

Ash	4.21	per	cent.
Total starch	25.53	- "	46
Volatile ether extract	1.45	"	"
Non-volatile ether extract	6.11	"	**
Crude fibre	18.50	"	66

Microscopic examination shows presence of wheat, rice, cayenne and foreign husks.

VINEGAR.

No. R—242. Sample of cider vinegar from H. W. Balch, Howell. Producer, Peter Nelson, Howell, Mich.

Specific gravity	1.0088
Acid as acetic	3.60 per cent.
Solids	1.59 " "
Ash	0.38 " "

Cider vinegar below the standard in solids and acid strength.

INSPECTIONS.

The following places were visited by the Department's inspection force

during the month of May:

Alden, Ashley, Bad Axe, Bellaire, Brighton, Cadillac, Calumet, Caseville, Central Lake, Chesterfield, Copemish, Crystal Falls, Deckerville, Delray, Detroit, Essex, Fairgrove. Farmington, Flint, Fowlerville, Franklin, Gibsonville, Goodrich, Grand Blanc, Grand Rapids, Hancock, Harbor Beach, Harrietta, Helena, Holly, Homestead, Houghton, Howell, Interlochen, Iron Mountain, Lansing, Laurium, Linden, Mancelona, Mesick, Milford, Minden City, Morrice, Mt. Clemens, Muskegon, New Baltimore, New Hudson, Northville, Norway, Novi, Omena, Pigeon, Pontiac, Port Austin, Royal Oak, Ruth, Sebewaing, Sherman, South Lyons, Sparta, St. Louis, Suttons Bay, Swartz Creek, Thompsonville, Torch Lake.

Report of dairies inspected during the month of May.

At Farmington:

- C. Paulger—Number of cows, 10; condition, good; feed, pasture, ground corn and oats; stables, good and clean, good light; ventilation, good; yard, dry and clean, good drainage. Retails.
- E. Conroy—Number of cows, 10; condition, good; feed, pasture; stables, fair but clean, light fair, fair ventilation; yard, dry and clean, fair drainage; water, spring. Sells to Warner's Cheese Factory. Durham grades.
- C. Krum—Number of cows, 6; condition, good; feed, pasture; stables, good and clean, light good, good ventilation; yard, dry and clean, good drainage; water, spring. Sells to Warner's Cheese Factory. Holstein and Durham grades.
- C. Shute—Number of cows, 12; condition, good; feed, pasture, ground corn and oats; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Warner's Cheese Factory. Holstein grades.
- E. C. Dickinson—Number of cows, 9; condition, good; feed, pasture; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Warner's Cheese Factory. Durham grades.

- W. Parish—Number of cows, 20; condition, good; feed, pasture, ground corn and oats; stables, good and clean, good light ventilation, good; yard, dry and clean, good drainage; water, spring. Sells to Warner's Cheese Factory. Holstein, Durham and Guernsey grades.
- F. H. Bode—Number of cows, 18; condition, good; feed, pasture, ground corn and oats; stables, good and clean, good light, ventilation, good; yard, dry and clean; water, well. Sells to Warner's Cheese Factory. Holsteins and Holstein grades.
- C. E. Hallock—Number of cows, 7; condition, good; feed, hay and pasture; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Makes butter. Durham and Jersey grades.
- C. Brown—Number of cows, 13; condition, fair; feed, pasture; stables, fair but clean, fair light, ventilation, fair; yard, dry and clean, fair drain-age; water, spring. Sells to Warner's Cheese Factory. Durham grades.
- C. Smith—Number of cows, 7; condition, good; feed, pasture, ground corn and oats; stables, good and clean, light, good, good ventilation; yard, dry and clean, fair drainage; water, well and spring. Sells to Warner's Cheese Factory. Native grades.
- H. Pagels—Number of cows, 8; condition, good; feed, pasture, ground corn and oats; stables, good and clean, light, fair, fair ventilation; yard, dry and clean, good drainage; water. well. Sells to Warner's Cheese Factory. Jersey, Durham and Holstein grades.
- S. Lock—Number of cows, 8; condition, good; feed, hay, pasture, ground corn and oats; stables, good and clean, good light; yard, dry and clean, good drainage; water, well. Sells to Warner's Cheese Factory, Holstein, Durham and Jersey grades.
- E. Pinnow—Number of cows, 6; condition, good; feed, pasture, ground oats and wheat; stables, good and clean, light, good, good ventilation; yard, dry and clean, fair drainage; water, well. Sells to Warner's Cheese Factory. Durham and Holstein grades.
- C. Westfall—Number of cows, 8; condition, good; feed, pasture; stables, good and clean, fair light, ventilation, good; yard, dry and clean, fair dainage; water, well. Sells to Warner's Cheese Factory. Holstein grades.
- F. Westfall—Number of cows, 7; condition, good; feed, pasture and cornmeal; stables, good and clean, light, good, good ventilation; yard, dry and clean, good drainage; water, spring. Sells to Warner's Cheese Factory. Holstein grades.
- H. Spoler—Number of cows, 10; condition, good; feed, pasture; stables, good and clean, good light, fair ventilation; yard, dry and clean, fair drainage; water, well. Sells to Warner's Cheese Factory. Jersey. Dur ham and Holstein grades.

- J. Guldner—Number of cows, 12; condition, good; feed, hay, ground oats and rye; stables, fair and clean, light, fair; yard, dry and clean, good drainage; water, well. Sells to Warner's Cheese Factory. Durham and Holstein grades.
- J. H. Johnson—Number of cows. 9; condition, good and clean; feed, hay, ensilage, ground corn and oats and bran; stables, good and clean, good light, ventilation, good; water, well. Sells to Warner's Cheese Factory. Thoroughbred Holsteins. A fine herd.
- M. Hewton—Number of cows, 24; condition, good and clean; feed, hay, ground corn, oats and wheat; stables, good and clean, cement floor, good light and ventilation; yard, dry and clean, good drainage; water, well. Sells to Warner's Cheese Factory. Holstein and Holstein grades.
- W. H. Lewis—Number of cows, 14; condition, good and clean; feed, hay, ensilage, bran, ground corn, oats and rye; stables, fair but clean, fair light; ventilation, fair; yard not good; water, well. Retails, aerates. Milk room, neat and clean. Jersey grades.

William Moss—Number of cows, 10; condition, good and clean; feed, hay, bran, ground corn and oats; stables, good and clean, light, poor, ventilation, poor; yard, fairly dry and clean; water, well. Sells to Warner's Cheese Factory. Holstein grades.

At Franklin:

- C. Seeley—Number of cows. 11; condition, good; feed, hay, ground corn and oats; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Warner's Cheese Factory. Holstein grades.
- D. Harger—Number of cows, 12; condition, good; feed, hay, ground corn and oats; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Warner's Cheese Factory. Holstein, Durham and Jersey grades.
- W. V. Mason—Number of cows, 8; condition, good; feed, pasture, ground corn and oats; stables, good and clean, good light, ventilation. good; yard, dry and clean, good drainage; water, well. Sells to Warner's Cheese Factory. Durham grades.
- J. Grooelan—Number of cows, 12; condition, good; feed, pasture, ground wheat and oats; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Warner's Cheese Factory. Holstein and Jersey grades.
- E. Higby—Number of cows, 6; condition, good and clean; feed, pasture, ground corn, oats and wheat; stables, fair but clean, light fair, fair ventilation, yard, dry and clean, good drainage; water, well. Sells to Warner's Cheese Factory. Durham and Holstein grades.

At Holly:

- E. E. Johnson—Number of cows, 18; condition, good and clean; feed, pasture, ground corn. oats and bran; stables, good and clean; good light, ventilation, good; yard, dry and clean, good drainage; water, well. Retails. Test 3.6 per cent. Jersey and Durham grades.
- A. Shields—Number of cows, 11; condition, good and clean; feed, pasture; stables, fair but clean; fair light, ventilation, fair; yard, dry and clean, good drainage; water, well. Retails. Milk tests 3.4 per cent. Jersey and Durham grades.

At Milford:

- C. L. Pearson—Number of cows, 24; condition, good and clean; feed, pasture and bran; stables, good and clean, good light, good ventilation; yard. dry and clean; water, well and spring. Sells to Milford Cheese Factory. Jersey, Durham and Holstein and native grades.
- T. Crowfield—Number of cows, 11; condition, good and clean; feed, pasture, cornmeal and bran; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Milford Cheese Factory. Durham grades.
- R. Robson—Number of cows, 5; condition, good and clean; feed, pasture, stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Milford Cheese Factory. Jersey grades.
- N. L. Clark—Number of cows. 15; condition, good and clean; feed, pasture. ground rye and oats; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well and spring. Sells to Milford Cheese Factory. Jersey and Holstein grades.

At Northville:

- W. H. Thornton—Number of cows, 20; condition, good; feed, hay, ground corn and oats; stables, good and clean, light good. good ventilation; yard, dry and clean, good drainage; water, spring. Test 3.6 per cent. Retails; cools in ice tank; wagon in fair condition. Durham and Jersey grades.
- W. E. Ambler—Number of cows, 20; condition, good; feed, hay, ground corn, oats and wheat; stables. good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, spring. Test 3.9 per cent. Retails; cools in spring house. Wagon first-class. Jersey and Durham grades.
- G. C. Benton—Number of cows, 26; condition, good; feed, hay, bran, ground corn and oats; stables, good and clean, light, fair, good ventilation; yard, dry and clean, good drainage; water, well. Test 3.6 per cent. Retails; cools in ice tank. Durham and Jersey grades.
- G. W. Clark—Number of cows, 11; condition, good; feed, hay, ground corn. oats and mangles; stables, good and clean, good light, ventilation,

good; yard, dry and clean, good drainage; water, well. Test, 3.4 per cent. Sells to cheese factory. Holstein and Jersey grades.

J. Miller—Number of cows, 10; condition, good; feed, hay, ground corn and oats; stables, fair and fairly clean, fair light, ventilation, good; yard, dry and clean, good drainage; water, spring. Test, 3.3 per cent. Sells to cheese factory. Durham and Holstein grades.

At Pontiac:

- G. L. Todd—Number of cows, 8; condition, good; feed, pasture; stables, fair, but clean, light, fair, fair ventilation; yard, dry and clean, good drainage; water, well. Retails; wagon, fair. Jersey, Ayrshire and Durham grades.
- W. H. Kemp—Number of cows, 30; condition, good and clean; feed, pasture, cornmeal and bran; stables. good and clean, good light, ventilation, good; yard, dry, clean and well drained; water, spring. Retails; wagon, good and clean. Jersey grades.
- J. E. Callow—Number of cows, 22; condition, good; feed, pasture; stables. good and clean, good light, ventilation, good; yard, dry, good drainage; water, spring. Retails. Jersey and Durham grades.
- I. S. Taylor—Number of cows, 18; condition, good; feed, pasture; stables, good and clean, good light, ventilation, good; yard, dry and clean, well drained; water, well. Retails.
- S. Nott—Number of cows, 24; condition, good and clean; feed, pasture; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Retails, aerates. Jersey and Guernsey grades.
- R. Bartlett—Number of cows, 44; condition, good and clean; feed, pasture, ground corn, oats and bran; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Wholesales and retails. Jersey herd.
- B. M. Webster—Number of cows, 30; condition, good and clean; feed, pasture, ground corn, oats and middlings; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water well and spring. Retails. Wagon good, clean and neat. Durham and Jersey grades.

At Royal Oak:

Black Meddow Dairy Co.—Number of cows, 75; condition, extra good; feed, pasture, ground corn and oats; stables, good and clean, good light ventilation, good; yard, dry and clean, good drainage; water, spring. Sells to Detroit Creamery Co. Thoroughbred Jerseys and Jersey grades.

A. Johnson—Number of cows, 8; condition, good; feed, pasture; stables, good and clean, light fair, fair ventilation; yard, dry and clean:

water, well. Sells to Detroit Creamery Co., Royal Oak Milk Station. Holstein and Jersey grades.

- J. Gifford—Number of cows, 14; condition, good; feed, pasture; stables, good and clean, fair light, ventilation, good; yard, dry and clean fair drainage; water, well. Sells to Detroit Creamery Co., Royal Oak Milk Station. Jersey, Durham and Holstein grades.
- G. Gettis—Number of cows, 10; condition, good; feed, pasture; stables, good and clean, good light, ventilation, good; yard, dry and clean, fair drainage; water, well. Sells to Detroit Creamery Co., Royal Oak Milk Station. Holstein grades.
- F. Morrell—Number of cows, 10; condition, good; feed, pasture and cornmeal; stables, good and clean, good light, ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Detroit Creamery Co.'s Royal Oak Milk Station. Jersey and Durham grades.
- J. Limebaugh—Number of cows, 11; condition, good; feed, pasture, ground corn, oats and bran; stables, good and clean, fair light, ventilation. fair; yard, dry and clean, good drainage; water, well. Sells to Detroit Creamery Co.'s Royal Oak Milk Station. Durham grades.
- J. Selkey—Number of cows, 9; condition, good; feed, pasture; stables, fair but clean, fair light, ventilation, fair; yard, dry and clean, good drainage; water, well. Sells to Detroit Creamery Co.'s Royal Oak Milk Station. Durham grades.

INSPECTION OF CREAMERIES AND CHEESE FACTORIES.

Genesee County:

Flint Sanitary Milk Co., Flint, Mich. T. H. Baker, manager. Yearly receipts of milk, 1,825,000 lbs. Outfit consists of 2 No. 1 separators, 1 600 gal. receiving vat, 1 400 gal. cream vat, 1 200 gal. skim milk vat, 1 250 gal. churn, 1 single set Miller pasteurizers, 1 12 tube automatic bottler. 1 bottle washer and sterilizer, 1 can washer and sterilizer, 1 ice crusher. 1 power ice cream freezer, 1 18 H. P. engine, 1 25 H. P. boiler, 1 compress air machine, 5 delivery wagons in fine condition.. Condition of buildings extra good, clean and sanitary in every part; of apparatus, fine and extra clean, nicely arranged for handling a large amount of milk; of surroundings, fine, sewer connections give good drainage. Average test of milk, 3.8 per cent. Yearly production 1,270,000 lbs. pasteurized milk. 60,000 lbs. pasteurized cream and 200,000 lbs. butter. Number of patrons. 35. Market, sells butter to the Pontiac asylum.

Gibsonville Creamery, Gibsonville, Mich. H. Gibson, manager. Yearly receipts of milk, 1,400,000 lbs. Outfit consists of 1 Alpha separator. 1 400 gal, receiving vat, 1 300 gal. box churn, 1 Mason butter worker. 1 24 lb. butter print, 1 24 bottle tester. Condition of building, good and sanitary; of apparatus, good and clean; of surroundings, good, with extra good drainage. Average test of milk, 4.2 per cent. Yearly prodution of butter, 63,400 lbs. Color, high; salt, medium. Number of patrons 35. Market, Buffalo.

Goodrich Creamery, Goodrich. Mich. W. A. Clark, manager. Yearly receipts of milk, 2,070,000 lbs. Outfit consists of 1 No. 1 separator, 1 600 gal, receiving vat, 1 250 gal, cream vat, 1 300 gal. churn, 1 24 bottle tester, 1 butter print, 1 automatic skim milk weigher, 1 15 H. P. engine, 1 25 H. P. boiler. Condition of buildings fairly good and clean, sanitary in every part; of apparatus, good and clean; of surroundings, good, with good drainage. Average test of milk, 3.4 per cent. Yearly production of butter, 90,000 lbs. Color, medium; salt, medium. Number of patrons, 65. Market, New York.

Macomb County:

Chesterfield Creamery, Chesterfield, Mich. C. T. Jordan, manager. Yearly receipts of milk, 11,000,000 lbs. Outfit consists of 2 No. 1 separators, 1 200 gal. receiving vat, 2 300 gal. cream ripeners, 2 450 gal. churns, 1 20 H. P. boiler, 1 12 H. P. engine, 150 gal. cream starter vat. 1 32 bottle tester. Condition of building, good, clean and sanitary; of apparatus, good and clean; of surroundings, good, with good drainage.

Average test of milk, 4.1 per cent. Yearly production of butter, 500,000 lbs. Color, medium; salt, medium. Number of patrons, 415. Market, New York, Philadelphia and Detroit. The receipts of milk include the milk received at their stations at Mt. Clemens, Mead and Waldenburg.

Mead Station. Outfit consits of 2 No. 1 separators, 1 400 gal. receiving vat, 1 400 gal. cream vat, 1 10 H. P. boiler, 1 12 bottle tester. C. T. Jordan Jr., superintendent.

Waldenburg Station. Outfit consists of 2 No. 1 separators, 1 Russian separator, 1 400 gal. receiving vat, 1 400 gal. cream vat, 1 12 H. P. boiler, 1 12 bottle tester. C. J. Jordan Jr., superintendent.

Mt. Clemens Skimming Station, Mt. Clemens, Mich. Chesterfield Creamery Co., managers. Yearly receipts of milk, 1,600,000 lbs. Outfit consists of 1 200 gal, receiving vat, 1 No. 1 separator, 1 200 gal. cream vat, 1 32 bottle tester, 1 12 H. P. boiler. Condition of buildings, extra good, clean and sanitary in every particular; of apparatus, good; of surroundings, good, with sewer drainage. Average test of milk, 4.0 per cent. Number of patrons, 48. Ships cream to Chesterfield.

Mt. Clemens Milk Station, Mt. Clemens, Mich. Detroit Creamery Co., owners J. W. Graham, manager. Yearly receipts of milk 1,250,000 lbs. Outfit consists of 4 800 gal. milk vats, 1 ice vat, 40 10 gal. can capacity, 1 ice vat, 10 ten gal. can capacity, 1 water heater. Condition of building, good and clean, thoroughly sanitary; of apparatus, good, clean and thoroughly sterilized; of surroundings, good, with extra good drainage. Average test of milk, 3.5 per cent. Number of patrons, 27. Market, ships milk and cream to Detroit. Cools in ice tank to 40° F.

New Baltimore Creamery, New Baltimore, Mich. C. Schlasser, manager. Yearly receipts of milk, 2,100,000 lbs. Outfit consists of No. 1 separator, 1 400 gal. receiving vat, 1 400 gal. cream vat, 1 400 gal. churn, 1 Mason butter worker, 1 butter printer, 1 20 bottle tester, 1 8 H. P. engine, 1 12 H. P. boiler. Condition of building, good, clean and sanitary; of apparatus, good and clean; of surroundings, good, with extra good drainage. Average test of milk, 3.9 per cent. Yearly production of butter, 91,000 lbs. Color, high; salt, medium. Number of patrons, 95. Market, Detroit. Sells in tubs and prints.

Oakland County:

Royal Oak Milk Station, Royal Oak, Mich., Detroit Creamery Co., managers. Yearly receipts of milk, 1,460,000 lbs. Condition of building, good and clean; of apparatus, good; of surroundings, dry, with fair drainage. Average test of milk, 3.8 per cent. Number of patrons, 22. Market, Detroit.

St. Clair County:

St. Clair Creamery and Sanitary Condensing Co., St. Clair. Mich. C. H. Otter and J. F. Ruff, proprietors. Yearly receipts of milk, from St. Clair dairymen, 1,825,000 lbs; from Hillsdale Milk Station, 1,800,000

lbs; from Rattle Run Milk Station, 1,460,000 lbs. Total 5,085,000 lbs. Yearly production, of butter, 60,000 lbs. Balance of milk used for cream, ice cream and condensing purposes. All milk and cream pasteurized. Market, Detroit, Port Huron, Buffalo and Boston. Building divided into three departments, creamery, ice cream and condensing; each department clean and sanitary in every particular; apparatus in each department in fine condition; cold storage room large and conveniently arranged. Sanitary conditions of surroundings, good; drainage, city sewer system.

In creamery department, outfit consists of 1 400 gal. receiving vat. 2 No. 1 separators, 1 400 gal, cream ripener, 1 600 gal. churn, 1 400 gal. pasteurizer, 1 80 gal. starter vat, 1 200 gal. skim milk pasteurizer, 1 air compresser, 1 butter print, 1 24 bottle tester, 1 12 H. P. engine, 1 30 H. P.

boiler.

In condensing department, outfit consists of 2 hot wells, capacity, 240 gallons, 1 vacuum pan, capacity, 4,000 lbs, 1 600 gal milk vat, 1 vacuum pump, 1 12 can rotary cooler, 1 60 H. P. boiler.

In ice cream department, outfit consists of 1 power ice cream freezer,

1 power ice crusher, 4 cooling vats, capacity, 100 cans.

Hillsdale Milk Station. Outfit consists of 1 No. 1 separator, 1 300 gal. receiving tank, 1 300 gal. pasteurizer, 1 10 H. P. boiler, Otter and Ruff, proprietors, A. Radakee, manager.

Rattle Run Milk Station, outfit consists of 1 No. 1 separator, 1 300 gal receiving vat, 1 10 H. P. boiler, Otter and Ruff, proprietors, F. Jackson, manager.

Genesee County:

Richards Cheese Factory, Flint, R. F. D. No. 3, Mich., Richards and Sons, owners and managers. Yearly receipts of milk, 1,200,000 lbs. Outfit consists of 1 750 gal. cheese vat, 1 500 gal. cheese vat, 1 18 hoop gang press, 1 6 hoop upright press, 1 6 H. P. boiler. Condition of building, good, clean and sanitary; of apparatus, clean and neat; of surroundings, good, with good drainage. Average test of milk, 3.4 per cent. Yearly production of cheese, 120,000 lbs. Number of patrons, 27. Market, home.

Oakland County:

Farmington Home Factory, Farmington, Mich., Fred M. Warner, owner and manager. Yearly receipts of milk, 2,000,000 lbs. Outfit consists of 1 500 gal. cheese vat, 1 800 gal. cheese vat, 1 curd sink, 2 gang presses, 15 hoop each, 1 6 H. P. boiler, 1 32 bottle tester. Condition of building, good, clean and sanitary in every particular; of apparatus, good and clean; curing room in fine condition; of surroundings, good, clean and sanitary, with good drainage. Average test of milk, 3.5 per cent. Yearly production of cheese, 200,000 lbs. Numbers of patrons, 39. Market, home. Brand, Warner's Oakland County Cheese. Makes Cheddar cheese.

Powers Cheese Factory, Farmington, R. F. D. No. 2, Mich., J. D. Dennis, manager. Yearly receipts of milk, 1,600,000 lbs. Outfit con-

sists of 1 750 gal. cheese vat, 1 curd sink, 1 curd mill, 1 15 hoop gang press, 1 15 H. P. boiler. Condition of building, good, new and up-to-date in every particular, thoroughly sanitary; of apparatus, good, new and clean; of surroundings, good and sanitary, good drainage. Average test of milk, 3.4 per cent. Yearly production of cheese, 160,000 lbs. Number of patrons, 29. Market. Detroit. Makes Cheddar cheese.

Franklin Cheese Factory, Franklin, Mich.. F. M. Warner, owner and manager. Yearly receipts of milk, 1,200,000 lbs. Outfit consists of 1 curd mill, 1 600 gal. cheese vat, 1 500 gal. cheese vat, 1 curd sink, 1 18 hoop gang press. 1 12 bottle tester, 1 4 H. P. boiler. Condition of building, good, clean and sanitary in every part; of apparatus, good and clean; of surroundings, good, sanitary, with good drainage. Average test of milk, 3.6 per cent. Yearly production, of cheese, 120,000 lbs. Number of patrons, 34. Market, home. Makes Cheddar cheese.

Grand Blanc Cheese Factory, Grand Blanc, Mich., H. R. Dewey, manager. Yearly receipts of milk, 800,000 lbs. Outfit consists of 2 400 gal. cheese vats, 1 curd sink, 2 16 hoop gang presses, 1 8 H. P. boiler. Condition of building, good and clean, sanitary in every part; of apparatus good and clean; of surroundings, good, with good drainage. Average test of milk, 3.3 per cent. Yearly production of cheese, 80,000 lbs. Number of patrons, 35. Market, home.

Milford Cheese Factory, Milford, Mich., J. Wise, manager. Yearly receipts of milk, 600,000 lbs. Outfit consists of 1 500 gal. cheese vat, 1 curd sink, 1 curd mill, 1 20 hoop gang press, 1 8 bottle tester, 1 12 H. P. boiler, 1 10 H. P. engine. Condition of building, good, clean and sanitary; of apparatus, clean; of surroundings, good, with good drainage. Average test of milk, 3.4 per cent. Yearly production of cheese 60,000 lbs. Number of patrons, 19. Market, home.

New Hudson Cheese Factory, New Hudson, Mich., E. J. Rice, manager. Yearly receipts of milk, 1,200,000 lbs. Outfit consists of 1 600 gal. cheese vat, 1 300 gal. cheese vat, 1 curd sink, 1 curd mill, 1 12 H. P. boiler, 1 10 bottle tester. Condition of building, good, clean and sanitary in every particular; of apparatus, good and clean; of suroundings, good, dry and sanitary in every part. Average test of milk, 3.3 per cent. Yearly production of cheese, 121,000 lbs. Number of patrons, 40. Market, home. Makes Cheddar cheese.

Novi Cheese Factory, Novi, Mich.. F. M. Warner, owner and manager. Yearly receipts of milk, 850,000 lbs. Outfit consits of 1 700 gal. cheese vat. 1 500 gal. cheese vat, 1 curd sink, 1 16 hoop gang press, 1 curd mill, 1 8 H. P. boiler. Condition of building, good, clean and sanitary in every particular; of apparatus, good and clean; of surroundings, good and sanitary, good drainage. Average test of milk, 3.3 per cent. Yearly production of cheese, 82,000 lbs. Number of patrons, 26. Market, home. Makes Cheddar cheese.

Wayne County:

Northville Condensing and Cheese Factory, Northville. Mich., Warner and Richardson, owners and managers. Yearly receipts of milk, 2,000,-

000 lbs. Outfit consists of 1 750 gal. cheese vat, 1 500 gal. cheese vat. 1 curd sink, 1 28 hoop gang press, 1 curd mill. 1 12 bottle tester, 1 12 H. P. boiler, 1 6 H. P. engine in cheese factory, and 2 hot wells, 1 condensing pan, 1 vacuum pump, 1 700 gal. receiving vat, 1 10 can cooling vat in condenser. Condition of building, good. clean and sanitary; of apparatus good and clean; of surroundings, good, with good drainage. Average test of milk, 3.6 per cent. Yearly production of cheese, 150,000 lbs. and 50,000 lbs. Condensed milk. Number of patrons, 50. Market, home and Detroit.

APIARY INSPECTION.

At Ashley:

Mrs. William Wray—Number of colonies, 100; colonies, strong, but a few are infected with foul brood; yard, fair, honey house, neat; flora, clover basswood and fall flowers.

At Detroit:

Otto Kleinow-Number of colonies, 1; colonies, excellent; yard, very neat, honey house, neat; flora. clover.

At Grand Rapids:

- F. B. Wild—Number of colonies, 25; colonies, healthy; yard, untidy; flora, clover and fruit blossoms.
- A. A. Wilson—Number of colonies, 30; colonies, some healthy, and some diseased. Yard, tidy; flora, clover and fruit blossoms. Will treat the diseased colonies.
- L. C. Woodman—Number of colonies, 50; colonies, healthy; yard, exceedingly neat; honey house, neat; flora, clover and fruit blossoms.

Fred Brown—Number of colonies, 4; colonies, fairly strong and healthy; yard, neglected; flora, clover and basswood.

Samuel Collard—Number of colonies, 11; colonies. strong and healthy; yard, clean and tidy; flora, clover and fruit blossoms.

A. J. Hagerdorn—Number of colonies, 17; colonies, very weak, but no foul brood; yard, neat, clean and orderly; flora, clover and fruit blossoms.

At Linden:

H. R. Van Wagner—Number of colonies, 12; colonies, healthy; yard, neglected, honey house, fair; flora. basswood and clover.

At Morrice:

4

W. H. Kirker—Number of colonies, 60; colonies, a few slightly diseased, will be treated; yard, neat; honey house, neat; flora, basswood and clover.

Frank Graham—Number of colonies, 1; colony, healthy; yard, fair; flora, basswood and clover.

W. Brown—Number of colonies, 20; colonies, all healthy except one; yard, neglected; flora, basswood and clover.

At Sparta:

Calvin Crane—Number of colonies, 37; colonies, healthy; yard, neat; flora, clover and fruit blossoms.

A. B. Cheney—Number of colonies, 60; colonies, healthy; yard, neat; honey house, neat; flora, clover and fruit blossoms.

At St. Louis:

- E. S. Trot—Number of colonies, 100; colonies, a few have foul brood; yard, untidy; honey house, fair; flora, basswood and clover.
- J. H. Palmer—Number of colonies. 14; colonies, excellent; yard, neat; flora, basswood and clover.

Peter Van Vrankin—Number of colonies, 5; colonies, strong and healthy; yard, neat; flora, basswood and clover.

- W. Goodnuff-Number of colonies, 1; colonies, healthy; yard, fair; flora, basswood and clover.
- E. Stohl—Number of colonies, 1; colony, healthy; yard, fair; flora, basswood and clover.

At Swartz Creek:

Elmer Campbell—Number of colonies, 5; colonies, good; yard, fair; flora, basswood and clover.

Milton Wilcox—Number of colonies, 40; colonies, excellent; yard, neat; honey house, fair; flora, basswood and clover.

- C. E. Herrick—Number of colonies, 40; colonies, healthy; yard, very neat; flora, basswood and clover.
- T. D. Bloss—Number of colonies, 160; colonies, a few have foul brood; yard, fair; honey house, untidy; flora, clover and basswood.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

of a diseased animal;

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;

2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;

3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;

4. If it is in imitation of, or is sold under the name of another article;
5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article. whether manufactured or not, or, in the case of milk, if it is the product

6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed. or if by any means it is made to appear better or

of greater value than it really is, except in the case of pure butter, which may be colored;

7. If it contains any added substance or ingredient which is poisonous or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;

2. They must contain nothing injurious to health;

3. They must not be sold in imitation of, or under the name of another article;

4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound;

5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

Buckwheat Flour.—If labeled, "Buckwheat Flour" must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," "Buckwheat Flour Substitute," or "Adulterated Buckwheat Flour," in letters not less than one inch in length, followed by the name and address of the maker. Buckwheat Flour containing no other ingredients but for leavening and seasoning purposes may be sold if labeled, "Selfrising Buckwheat Flour."

Butter.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Process butter must be labeled as such. See ruling under head of Process Butter. Candy.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

Catsup.—All packages containing same must bear the name and address of the

manufacturer. Must contain no ingredients injurious to health.

Cheese.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cream is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words. "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar.

Coffee.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound," together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

Coffee Substitute.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

Chocolates and Cocoas.—If containing no other substances than cocoa mass

sugar and flavoring will not be classed as a compound or mixture.

Canned Goods.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica in size.

Cream of Tartar.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

Extracts, Flavoring.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extracts of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. Extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

Farinaceous Goods.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Taploca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

Honey.-Must be pure. Cannot be mixed with glucose or other substances and

sold as "Honey Compound."

Jelly.—Imitation fruit jellies, butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly or Butter," with the name and location of manufacturer, and have no other label of whatever name.

Lard.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquors.—Spirituous, fermented, or malt liquors must not contain drugs or poison or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquor from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.

Maple Sugar and Maple Syrup.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup

Compound."

Milk.—Must contain not less than 3 per cent fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased or fed upon the refuse of a distillery or brewery, or upon any sub-

stance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives to milk is prohibited.

Molasses.—Must be branded with its true and appropriate name and must be true

to same. (See Syrup.)

Oleomargarine.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where oleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words "Oleomargarine Sold or Used Here," printed in blank ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where oleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica

in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrappped for sale.

Oleomargarine must not contain artificial coloring matter.

Pancake Flours.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and

address of the manufacturer or compounder.

Pepper.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

Prepared Mustard.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared Mustard" and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer, but no printed matter of any description will be allowed above the name "Prepared Mustard."

Process Butter.—All packages containing same sold, offered or exposed for sale,

or in possession with intent to sell, must be labeled "Process Butter."

Packages put up for immediate delivery must be covered by wrappers on which

must be printed in conspicuous letters the words "Process Butter."

If packed in tubs or other receptacles the words "Process Butter" must be printed

in one-inch letters on the top and two sides of the same.

If uncovered and not contained in a tub or receptacle a placard containing the words "Process Butter" must be attached to the mass, in a manner making them

plain and prominent.

Syrups.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses or syrup mixed with glucose shall be branded or labeled "Glucose Mixture" and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch

in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer.

Spices.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though

the package be labeled mixture or compound. (See pepper.)

Vinegar.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

LANSING MICHIGAN
ROBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS
1908

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

A. W SMITH, -	-	-	-	-	_	· -	COMMISSIONER
PERLEY C. HEALD,	-	-	-	<u>-</u>	-	DEPUTY	COMMISSIONER
R. E. POOLITTLE.	_	_	_	_	_	_ 8	TOWNER A STATE OF

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

JELLIES, JAMS, PRESERVES AND FRUIT BUTTER.

This department holds that under Section 5022 of the Compiled Laws of 1897 of Michigan, jellies, jams, preserves, fruit butter or other similar compounds that contain glucose, dextrine, starch or other substance, are *imitations*, and are not salable in this State unless free from artificial coloring, and are distinctly labeled "Imitation Fruit Jelly, Jams, Preserves or Fruit Butter," together with the name of the manufacturer and the place where made. This includes all the so-called *pie fillings* and that class of goods.

The sale of any such goods artificially colored, even though properly labeled, would be in violation of the law. And while it is the intention to strictly enforce every requirement of this section as above construed by this department, all dealers will have until July 1, 1904, to dispose of all such above mentioned goods put up in bottles (Jams and Preserves) that may be held in stock by them on or before January 1, 1904, provided satisfactory proof is furnished this department that the said goods were in their possession on or before that date.

Under no circumstances, however, will the sale of any such goods be permitted if they contain any substance or ingredient which is poisonous or injurious to health.

NEW LEGISLATION.

The attention of manufacturers and dealers is called to the laws enacted at the last session of the legislature governing the manufacture and sale of food products in this State, and which are published in this issue of the bulletin.

The acts herein referred to, take effect September 17, except that governing the manufacture and sale of Corn Syrup, which was given immediate effect.

AN ACT in relation to the manufacture and sale of renovated butter.

The People of the State of Michigan enact:

Section 1. No person, firm or corporation shall manufacture for sale, offer or expose for sale, sell, exchange or deliver, or have in his possession with the intent to sell, exchange or deliver, any butter that is produced by taking original packing stock butter or other butter, or both, melting the same so that the butter fat can be drayn off or extracted, mixing the said butter fat with skimmed milk, or milk or cream, or other milk product, and rechurning or reworking the said mixture; nor shall any person, firm or corporation manufacture for sale, offer or expose for sale, sell, exchange or deliver, or have in his possession for any such purpose, any butter which has been subjected to any process by which it is melted, clarified or refined, and made to resemble butter, and is commonly known as boiled, process or renovated butter, and which for the purpose of this act is hereby designated as "Renovated Butter," unless the same shall be branded or marked as provided in section two of this act.

Whoever, himself or by his agent, or as the servant or agent of another person shall sell, expose for sale or have in his custody or possession with the intent to sell any "Renovated Butter," as defined in section one of this act, shall have the words "Renovated Butter" conspicuously stamped, labeled or marked in one or two lines and in plain gothic letters, at least three-eighths of an inch square, so that the words cannot be easily defaced, upon two sides of each and every tub, firkin, box or package containing said "Renovated Butter;" or, if such butter is exposed for sale uncovered, or not in a case or package, a placard containing said words in the same form as above described in this section shall be attached to the mass in such a manner as to be easily seen and read by the pur-When "Renovated Butter" is sold from such package or otherwise at retail, in print, roll or other form, before being delivered to the purchaser it shall be wrapped in wrappers, plainly stamped on the outside thereof with the words "Renovated Butter" printed or stamped thereon in one or two lines, and in plain gothic letters at least threeeighths of an inch square, and such wrapper shall contain no other words or printing thereon, and said words "Renovated Butter" so stamped or printed on the said wrapper shall not be in any manner concealed, but shall be in plain view of the purchaser at the time of the purchase.

SEC. 3. Whoever shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be

punished by a fine of not less than twenty-five dollars nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail or Michigan Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment, in the discretion of the court, for each and every offense.

SEC. 4. Act number two hundred fifty-four of the public acts of eighteen hundred ninety-nine, entitled "An act to regulate the sale of butter produced by taking original packing stock and other butter and melting the same so that the butter oil can be drawn off, mixed with skimmed milk or other material, and by emulsion or other process produce butter, and butter produced by any similar process and commonly known as 'process' butter; providing for the enforcement thereof, and punishment for the violation of the same," is hereby repealed.

AN ACT in relation to the manufacture and sale of buckwheat flour.

The People of the State of Michigan enact:

Section 1. Within this State no person shall manufacture, offer or expose for sale, keep in possession with intent to sell, or sell any ground buckwheat containing any product of wheat, corn, rice or other foreign substance, unless each and every package thereof be distinctly and legibly branded or labeled "Buckwheat Flour Compound" in letters not less than one-half inch in length and be followed with the name of the maker and factory and location of such factory.

SEC. 2. Any brand or label herein required shall be an inseparable part of the general or distinguishing label, and such label shall be that principal and conspicuous sign under which it is sold, and any other label or printed matter upon the package shall not be in contravention of the requirements of this act.

SEC. 3. The having in possession of any buckwheat flour compound, which is not branded or labeled as hereinbefore required and directed upon the part of any person engaged in the public or private sale of such article, shall, for the purpose of this act, be deemed prima facie evidence of intent to sell the same.

SEC. 4. The taking of orders or the making of agreements or contract by any person, firm or corporation or by any agent or representative thereof, for the future delivery of buckwheat flour compound shall be deemed a sale within the meaning of this act.

SEC. 5. Whoever shall do any of the acts or things prohibited, or neglect or refuse to do any of the acts or things enjoined by this act, or in any way violate any of the provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not less than thirty nor more than ninety days, or by both such fine and imprisonment in the discretion of the court.

SEC. 6. Act number eighty-four of the public acts of eighteen hundred ninety-seven, entitled "An act to prohibit and prevent adulteration, fraud and deception in the manufacture and sale of buckwheat flour, being sections four thousand nine hundred ninety-four to five thousand two, both inclusive, of the Compiled Laws of one thousand eight hundred ninety-seven is hereby repealed.

AN ACT in relation to the sale of corn syrup.

The People of the State of Michigan enact:

Section 1. Ne person shall offer or expose for sale, have in his possession with intent to sell, or sell, any cane syrup, beet syrup, or glucose, unless the barrel, cask, keg, can, pail or package containing the same be distinctly branded or labeled with the true and appropriate name: nor shall any person offer or expose for sale, have in his possession with intent to sell, or sell any cane syrup or beet syrup mixed with glucose, unless the barrel, cask, keg, can, pail or package containing the same be distinctly branded or labeled "Glucose Mixture" or "Corn Syrup" in plain gothic type not less than three-eighths of an inch square, with the name and percentage by weight of each ingredient contained therein plainly stamped, branded or stenciled on each package in plain gothic letters not less than one-quarter of an inch square. Each and every package of syrup, either simple or mixed, shall bear the name and address of the manufacturer. Such mixtures or syrups shall have no other designation or brand than herein required that represents or is the name of any article which contains a saccharine substance; and all brands or labels required shall be an inseparable part of the general or distinguishing label, and that the general or distinguishing label shall be that principal and conspicuous sign under which it is sold.

SEC. 2. Whoever shall do any of the acts or things prohibited, or neglect or refuse to do any of the acts or things required by this act, or in any way violate any of the provisions, shall be deemed guilty of a misdemeanor, and shall be punished by a fine not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail for a period of not less than thirty nor more than ninety days, or by both such fine and imprisonment in the discretion of the court.

This act is ordered to take immediate effect.

Extract from Act No. 230.

Section 7. The commissioner, his deputy or any person by said commissioner duly appointed for that purpose, is authorized at all times to seize and take possession of any and all food and dairy products, substitutes therefor, or imitation thereof kept for sale, exposed for sale or held in possession or under the control of any person which in the opinion of the said commissioner, or his deputy, or such person by him duly appointed, shall be contrary to the provisions of this act or other laws which now exist or which may be hereafter enacted.

First, The person so making such seizure as aforesaid, shall take from such goods as seized a sample for the purpose of analysis and shall cause the remainder thereof to be boxed and sealed and shall leave the same in the possession of the person from whom they were seized, subject to such disposition as shall hereafter be made thereof according to the provisions of this act

Second, The person so making such seizure shall forward the sample so taken to the State Analyst for analysis, who shall make an analysis of the same and shall certify the results of such analysis, which certificate shall be prima facie evidence of the fact or facts therein certified to in any court where the same may be offered in evidence.

Third, If upon such analysis it shall appear that said food or dairy products are adulterated, substitutes or imitations within the meaning of

Digitized by GOOGIC

this act, said commissioner, or his deputy or any person by him duly authorized may make complaint before any justice of the peace or police justice having jurisdiction in the city, village or township where such goods were seized, and thereupon said justice of the peace shall issue his summons to the person from whom said goods were seized, directing him to appear not less than six or more than twelve days from the date of the issuing of said summons and show cause why said goods should not be condemned and disposed of. If the said person from whom said goods were seized cannot be found, said summons shall be served upon the person then in possession of the goods. The said summons shall be served at least six days before the time of appearance mentioned therein. person from whom said goods were seized cannot be found, and no one can be found in possession of said goods, and the defendants shall not appear on the return day, then said justice of the peace shall proceed in said cause in the same manner provided by law where a writ of attachment is returned not personally served upon any of the defendants and none of the defendants shall appear upon the return day.

Fourth, Unless cause to the contrary thereof is shown, or if said goods shall be found upon trial to be in violation of any of the provisions of this act or other laws which now exist or which may be hereafter enacted, it shall be the duty of said justice of the peace or police justice to render judgment that said seized property be forfeited to the State of Michigan, and that the said goods be destroyed or sold by the said commissioner for any purpose other than to be used for food. The mode of procedure before said justice shall be the same as near as may be as in civil proceedings before justices of the peace. Either parties may appeal to the circuit court as appeals are taken from justices' courts, but it shall not be neces-

sary for the people to give any appeal bond.

Fifth, The proceeds arising from any such sale shall be paid into the State Treasury and credited to the general fund: Provided, That if the owner or party claiming the property or goods so declared forfeited can produce and prove a written guarantee of purity, signed by the whole-saler, jobber, manufacturer or other party from whom said articles were purchased, then the proceeds of the sale of such articles, over and above the costs of seizure, forfeiture, and sale, shall be paid over to such owner or claimant to reimburse him, to the extent of such surplus, for his actual loss resulting from such seizure and forfeiture, as shown by the invoice.

Sixth, It shall be the duty of each prosecuting attorney when called upon by said commissioners or by any person by him authorized as aforesaid, to render any legal assistance in his power in proceedings under the provisions of this act, or any subsequent act relative to the adulteration of food, for the sale of impure or unwholesome food or food products.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., August 31, 1903.

Hon. A. W. Smith, Dairy and Food Commissioner:

Sir—During the month of August, 189 samples of food products have been examined, 150 being pure and 39 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

Totals.	Not found adulter- ated.	Found adulter- ated.
1 6 6 17 145 2 2 5 5	0 5 0 0 143 2	1 1 6 17 2 0
	0	5 5
	1 6 6 17 145	1 0 6 5 6 0 17 0 145 143 2 2 2 2 5 0 5 0 5

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

ALLSPICE.

No. K-446. Sample of Allspice from F. J. Few, Menominee.

Contains coumarin and is artificially colored.

Sold by J. P. Deiter C	Co Chicago. III.	
	ice and Extract Co., Chicago, Ill.	•
	8.09 per cent	
	2.47 "	
	tract 2.61 " "	
	or extract	
Crude fiber		
Contains an excess of	f woody fiber.	
	COCOA AND CHOCOLATE.	
	of Cocoa from T. J. Millikin, St. Clair. Cocoa Works, Boston, Mass.	• :
Water	4.14 per cent	•
	3.27 " "	
Sugar	57.86 " "	
	Trace	
	7.17 4 4	
	····· 1.49	
Not properly labeled.		•
	EXTRACTS (FLAVORING).	
No. L-357. Sample of	of "Compound XXXX Vanilla" from Bonner Bros., Van	nder-
Producer, P. X. Molor	ney, Cheboygan, Mich.	
Solids	2.91 per cent	
	0.02 " "	
	nt 15.24 " "	
Contains coumarin.		
No. L-362. Sample of A. J. Kyes & Co., Battle Producer, Foote & Je		from
	nt	
	9.25 "	
	0.05 " "	
	0.10 " "	

	SIRIE OF MIOHIGAN			
No.	L-363. Sample of "Watkin's Extract of Vanilla," fro	m Saı	nuel Myer	s, Jack-
	ducer, The J. R. Watkins Medical Co., Winona, Minn.			
	Total solids	18.11	per cent	
	Ash		- ee ee	
	Alcohol by weight		64 66 66 66	
	Sugar		""	
	VanillinCoumarin		** **	
Con	ntains coumarin.	0.00		
No Bran	R-286. Sample of "Extract of Vanilla," from Hee	enan	& Hibbler	, North
-	oducer, C. C. Sherman, North Branch, Mich.			
	Total solids	5.40	per cent	
	Ash		46 46	
	Alcohol by weight			
	Sugar			
	Vanillin	None		
	Color		gm	
Αn	extract of tonka colored.		0 -	
	oatract of today colored.			
canti	R-287. Sample of "Compound Extract of Vanilla," follows, Ltd., North Branch. Educer, C. C. Sherman, North Branch.	rom N	orth Bran	ch Mer-
	Total solids	5.36	per cent	
	Ash		- ee - 6e	
	Alcohol by weight		66 68	
	Sugar			
	VanillinCoumarin	None		
	Color		en	
An	extract of tonka colored.	. 0. 0.		
	TO A A A A A A A A A A A A A A A A A A A	•		. 27
Nortl	. R-289. Sample of "Battle Ax Extract of Vanilla," a Branch. oducer, Phelps, Brace & Co., Detroit, Mich.	irom	H. and C	. Fora,
	Total solids	11 10	non cont	
	Ash			
	Alcohol by weight		** **	
	Sugar			
	Vanillin		** **	
	Color			
_	Color	Forei	gn	
Co	ntains foreign coloring matter.			
	JELLY.			
	. K-447. Sample of "Pure Currant Jelly," from Thom d by Chicago Concentrating Co., Chicago, Ill.		·	ominee.
	Total solids		per cent	
	Ash		66 66	
	Reducing sugar			
	Color		ral	

Not all from currant juice.

•	
No. L-356. Sample of "Imitation Fruit Jelly," from Joseph Sold by C. Elliot, Detroit, Mich.	hine Cueny, Cheboygan
Producer, Williams Bros. & Charbonneau, Detroit, Mich.	
Total solids	
Ash	
Reducing sugar	04.00
Cane sugar	0.00
Glucose	20.00
Color, foreign	Red Coal Car dye
No. R-263. Sample of "Pie Filler, Cherry," from Francis Producer, Chapman & Smith Co., Chicago, Ill.	
Total solids	71.54 per cent 1.96 " "
Ash	1.50 1.78 " "
Reducing sugar	
Cane sugar	
Glucose	
Preservative	
Color, foreign	Red coal tar dve
An imitation fruit preserves.	
No. R-274. Sample of "Imitation Fruit Jelly, Currant," for St. Clair, Mich. Sold by Crusoe Bros., Detroit, Mich. Producer, The John Boyle Co., Baltimore, Md.	
Total solids	69.50 per cent
Ash	0.62 " "
Reducing sugar	37.68 " "
Cane sugar	1.10 " "
Glucose	58.48 " "
Color, foreign	Red coal tar dye
No. S-318. Sample of "Currant Jelly," from Miller & Pray Sold by Dwyer & Vhay, Detroit, Mich. Producer, John Boyle & Co., Baltimore, Md.	y, Ann Arbor.
Total solids	69 57 per cent
Ash	
Reducing sugar	
Cane sugar	
Glucose	
Color, foreign	
An imitation fruit jelly colored.	•
No. S-319. Sample of "Pie Filling, Currant," from Heus- Producer, Illinois Bakers' & Supply Co., Chicago, Ill.	el Bros., Ann Arbor.
Total solids	68.75 per cent
Insoluble solids	
Agh	0.62 " "
Reducing sugar	32.95 " "
Cane sugar	1.50 " "
Glucose	56.48 " "
Color, foreign	Red coal tar dye
An imitation fruit jelly colored.	-

No. Cl. 200. Comple of ((Champant Tolly)) from Displice & Doube	A	4-2
No. S-320. Sample of "Currant Jelly," from Bigalke & Reule Producer, Chapman & Smith, Chicago, Ill.	Ann	Arbor.
Total solids	96 ne	r cent
	55 ~	66
Reducing sugar 30	30 "	**
Cane sugar 0.		••
Glucose	V2	
An imitation fruit jelly colored.	a cost	tar dye
An imitation fruit jerry colored.		
No. S-321. Sample of Jelly from William Illi, Ann Arbor. Producer, Chapman & Smith, Chicago, Ill.		
Total solids 61.	60 per	cent
Ash 0.		44
Reducing sugar 31. Cane sugar 1.	80	••
Glucose		44
Color, foreign Re		tar dye
An imitation fruit jelly colored.		
N. (1000 (1) 1 4 (17) 1 1 2 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
No. S-323. Sample of "Empire Fruit Jelly," from Lamb & Sp Producer, Berdan & Co., Toledo, Ohio.		
Total solids		cent
Ash 0. Reducing sugar		"
Cane sugar		44
Glucose		
Color, foreign Re	d coal	tar dye
Not from pure currant juice.		
No. S-325. Sample of "Red Jelly" (Great Western Brand)	from	James Clark
Ypsilanti.	пош	Admine Clery
Producer, Illinois Bakers' Supply Co., Chicago, Ill.		
Total solids 67.		cent
Ash		66 66
Reducing sugar 31. Cane sugar 1.		"
Glucose	4 0	**
Color, foreign Re		tar dye
An imitation fruit jelly colored.		
No. S-327. Sample of "Currant Jelly," from Crusoe Bros. & Sold by Fred Newhoff, Detroit, Mich.	Co., I	etroit.
Producer, John Boyle & Co., Baltimore, Md.	40	
Total solids 62. Ash 0		rcent
Reducing sugar	55 "	44
Cane sugar 1	00 "	44
Glucose 56	51 "	44
Color, foreign Re	d coal	tar dye
An imitation fruit jelly colored.		
No. S-328. Sample of "Raspberry Jelly," from Crusoe Bros. Sold by Fred Newhoff, Detroit, Mich.	& Co.	, Detroit.
Producer, John Boyle & Co., Baltimore, Md.		
Total solids	22 per	rcent
	64 "	44
Reducing sugar 31		"
Cane sugar 1		ee es
Glucose	70	
An imitation fruit jelly colored.	u coal	· ····································
AM AMAGEMENT II GIT JOILJ CONVICE,		T

	No. S-829. Sample of "Strawberry Jelly," from Crusoe Bros. & Co., Detroit.
	Sold by Fred Newhoff, Detroit, Mich.
	Producer, John Boyle & Co., Baltimore, Md.
	Total solids 64.42 per cent
	Ash 0.67 " "
	Reducing sugar 31.82 " "
	Cane sugar 1.00 " "
	Glucose
	Color, foreign
	An imitation fruit jelly colored.
	An imitation little joily colored.
	No. S-330. Sample of "Blackberry Jelly," from Crusoe Bros. & Co., Detroit.
	Sold by Fred Newhoff, Detroit, Mich.
	Producer, John Boyle & Co., Baltimore, Md.
	Total solids
	Reducing sugar 33.93 " "
	Cane sugar
	Glucose
	Color, foreign
	·
	An imitation fruit jelly colored.
	No. S-331. Sample of "Imitation Fruit Preserves, Raspberry." from J. L. Freud
8	Co., Detroit.
_	Producer, Logan, Johnson & Co., Boston, Mass.
	Total solids
	100010016 801108 1.50
	ASH U.01
	Reducing sugar
	Cane sugar
	Preservative Benzoic acid
	Color, foreign
	•
	Imitation fruit preserves colored.
	No. S-332. Sample of "Imitation Fruit Preserves, Strawberry," from J. L. Freud
L	Co., Detroit.
	Producer, Logan, Johnson & Co., Boston, Mass.
	Total solids 70.00 per cent
	Insoluble solids
	Ash
	Cane sugar
	Glucose
	Preservative Benzoic acid
	Color, foreign Red coal tar dye
	·
	Imitation fruit preserves colored.
	No. S-333. Sample of "Imitation Fruit Preserves, Huckleberry," from J. L. Freud
	Co., Detroit.
۰	Producer, Logan, Johnson & Co., Boston, Mass.
	Total solids
	Insoluble solids 1.41 " "
	ASH V.50
	Reducing sugar 38.08 " Cane sugar 14.85 "
	Glucose
	Preservative Benzoic acid
	Color, foreign
	• -
	Imitation fruit preserves colored.

MILK.

No. T-1692. Sample of Milk from Rudell Farm Dairy, Gr		_	ds.
Specific gravity	1.023 90.14		r cent
Solids	9.86	P C.	"
Fat	2.93	"	66 64
Solids not fat	6.93	46	"
Below the standard in solids.	0.01		
Delow the standard in solids.			
No. T-1810. Sample of Milk from C. Larson, South Haven			
Specific gravity			4
Water		per	cent
Fat	1.51	**	**
Solids not fat	8.72	"	**
Ash	0.78	••	
below the standard in solids and lat.			
MUSTARD.			
No. K-443. Sample of Mustard from F. Braadsted & Co., In	shpen	ing	
Ash	_	_	
Mustard		•	
Turmeric			
Colored with turmeric.			
No. L-355. Sample of Mustard from E. S. Perry, Cheboygs Sold by VanZandt Co., Rochester, N. Y.			
Ash	2.38		cent
Wheat starch Mustard			••
Turmeric			
Adulterated with wheat flour and turmeric.			
DIADDIAD			
PEPPER.			
No. K-444. Sample of Black Pepper from C. H. Emmons, Sold by Puhl-Webb Co., Chicago, Ill. Producer, Puhl-Webb Co., Chicago, Ill.	Onto	nago	n.
Water	10.35		
Total ash	9.09	**	"
Ash insoluble in 10% hydrochloric acid	3.56 21.94	44	**
Volatile ether extract		**	66
	6.78	"	"
Crude fiber	19.5Z	•-	
Compasts mostly of ground pepper sheris.			
No. K-445. Sample of Black Pepper from F. J. Few, Menom Sold by J. P. Deiter Co., Chicago, Ill. Producer, Quaker Spice and Extract Co., Chicago, Ill.	linee.		
Water	9.13	per (cent
Total ash	7.44	46	**
Ash insoluble in 10% hydrochloric acid	1.24	"	44 44
Starch	15.03 0.78	66	44
Non-volatile ether extract	4.00	"	44
	29.54	**	"
Contains ground olive pits or a similar material. Digitized	by G	OC	gle

No. L-359. Sample of Black Pepper from Glysson & Ryan, Battle Creek. Sold by Franklin, McVeagh & Co., Chicago, Ill.

Water	13.19	per	cent
Total ash			
Ash insoluble in 10% hydrochloric acid	3.15	"	**
Starch	21.38	"	66
Volatile ether extract	0.61	**	"
Non-volatile ether extract	2.29	**	"
Crude fiber	20.29	**	"

Does not comply with standard for black pepper.

No. R-281. Sample of White Pepper from Wescott & Carrier, Almont. Producer, Toledo Coffee & Spice Co., Toledo, Ohio.

Water	10.69	per	cent
Total ash	4.75	- 66	66
Ash insoluble in 10% hydrochloric acid	0.38	"	"
Starch	33.70	"	**
Volatile ether extract	1.02	**	"
Non-volatile ether extract	7.01	"	**
Crude fiber	13.69	"	**

Contains husks foreign to pepper.

No. S-322. Sample of Black Pepper from Imperial Tea Store, Detroit. Producer, Knickerbocker Mills, New York, N. Y.

Water	7.53	per	cent
Total ash	4.52	- "	**
Ash insoluble in 10% hydrochloric acid	1.84	66	"
Starch	20.48	**	66
Volatile ether extract	0.81	44	**
Non-volatile ether extract			46
Crude fiber			"

Microscopic examination shows sample to consist of corn meal, wheat product, roasted shells probably cocoanut, and a little cayenne. Very little pepper present.

VINEGAR.

No. L-360. Sample of "Cider Vinegar," from Battle Creek Creamery Co., Battle Creek.

Producer, George P. Schmidt, Battle Creek, Mich. R. F. D. No. 1.

Specific gravity	1.0116		
Acid as acetic	3.48	per	cent
Total solids	1.37	- "	"
Ash	0.37	**	"

Cider vinegar below standard in solids and acid strength.

No. L-361. Sample of "Pure Apple Vinegar" (Holly Brand), from George A. Southerton, Battle Creek.

Sold by Walsh, Boyle & Co., Chicago, Ill.

Specific gravity	1.018		
Acid as acetic			ent
Total solids	2.68	- 64 - 6	36
Agh			

Examination of solids and ash show it is not from pure apple juice.

No. R-283. Sample of "Cider Vinegar," from John Ovens, Almont. Producer, Elmer Briggs, Almont, Mich.
Specific gravity 1.014 Total solids 2.65 per cent Acid as acetic 3.00 " Ash 0.29 " Polarization direct +1.0 degree Polarization invert +1.2 degrees
Reducing sugar after inversion 0.64 per cent
Below the standard in acid strength. Solids not from apple.
No. R-284. Sample of "Cider Vinegar," from Wilcox Bros., Dryden. Producer, John Heenan, Dryden, Mich.
Specific gravity 1.016 Acid as acetic 3.07 per cent Total solids 3.87 " Ash 1.45 " Polarization direct +2.4 degrees Polarization invert +2.6 degrees Reducing sugar before inversion 1.38 per cent
Below the standard in acid strength, and solids not from pure apple juice.
No. S-324. Sample of "Cider Vinegar," from C. H. Kingsbury & Co., Wayne. Producer, William Green, Wayne, Mich.
Specific gravity

INSPECTIONS.

The following places were visited by the department's inspection force

during the month of August:

Albion, Allouez, Almont, Battle Creek, Benton Harbor, Brest, Calumet, Carleton, Caro, Cass City, Chassell, Clayton, Clifford, Delray, Detroit, Doyle, Dryden, Escanaba, Flat Rock, Gagetown, Gladstone, Grand Haven, Grand Rapids, Hancock, Holland, Houghton, Ionia, Jackson, Kimball, L'Anse, Lansing, Laurium, Manistique, Marshall, Memphis, Menominee, Muskegon, New Boston, Newport, North Branch, North Lansing, Ontonagon, Owendale, Rockwood, Skanee, Smiths, South Haven, South Rockwood, St. Joseph, Townley, Trenton, Waltz, Willow, Wyandotte, Ypsilanti.

APIARY INSPECTION.

At Rollin:

Marion Smith—Number of colonies, 44; colonies, healthy; yard, sadly neglected; flora, clover and basswood.

- D. A. Roberts—Number of colonies, 3; colonies, healthy; yard, neglected; flora, clover and basswood.
- J. B. Selleck-Number of colonies, 5; colonies, healthy; yard, fair; flora, clover and basswood.

Howard Underhill—Number of colonies, 1; wony diseased; yard, fair; flora, basswood and clover.

A. A. Knowles—Number of colonies, 22; colonies, seven diseased; yard, fair; honey-house, fair; flora, basswood and clover. Diseased colonies will be destroyed.

Lewis Cole—Number of colonies, 26; 1 colony diseased; yard, slovenly; flora, basswood and clover.

Will Belcher—Number of colonies, 8; 1 has foul brood, others healthy; yard, fair; flora, basswood and clover.

- R. L. Bruen—Number of colonies, 7; colonies, healthy; yard, neglected; house, fair; flora, clover and basswood; honey sold in past year, 100 lbs.
- S. A. Raymond—Number of colonies, 20; colonies, 6, diseased; yard, fair; house, fair; flora, basswood and clover.
- M. Robinson—Number of colonies, 12; colonies, healthy; yard, fair; flora, clover and basswood.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE .

shall be deemed to be adulterated:

1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;

2. If any inferior or cheaper substance or substances have been sub-

stituted wholly or in part for it;

3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;

4. If it is in imitation of, or is sold under the name of another article;5. If it consists wholly or in part of a diseased, decomposed, putrid,

- 5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;
- 6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;
- 7. If it contains any added substance or ingredient which is poisonous or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof;

2. They must contain nothing injurious to health;

3. They must not be sold in imitation of, or under the name of another article:

4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture or compound:

5. A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

Buckwheat Flour.—If labeled "Buckwheat Flour," must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," in letters not less than one-half inch in length, followed with the name of the maker and the factory and the location of such factory. Any other label or printed matter upon the package shall not be in contravention of the above requirements.

Butter.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Renovated butter must be labeled as such. See ruling under head of Renovated Butter.

Candy.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

Catsup.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

Cheese.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cream is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar annually.

Coffee.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound,"

together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

Coffee Substitute.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

Canned Goods.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica in size.

Cream of Tartar.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

Extracts, Flavoring.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extracts of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. So called extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

Farinaceous Goods.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

Honey.—Must be pure. Cannot be mixed with glucose or other substances and sold as "Honey Compound."

Jellies, Jams, Fruit Butter, etc.—Imitation fruit jellies, jams, preserves, fruit butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or other substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly, Jam, Preserves or Fruit Butter," with the name and location of manufacturer, and have no other label of whatever name.

Lard.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquors.—Spirituous, fermented, or malt liquors must not contain drugs or poison or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquor from any barrel, cask or vessel, unless the same shall have been branded and marked as aforesaid.



Maple Sugar and Maple Syrup.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

Milk.—Must contain not less than 3 per cent fat and 12½-per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased or fed upon the refuse of a distillery or brewry, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives to milk is prohibited.

Molasses.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses mixed with glucose shall be branded or labeled "Glucose Mixture," and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer. (See Syrup.)

Oleomargarine.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale

or advertisement of any oleomargarine.

Proprietors of any place where eleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished, a white placard containing the words "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where eleomargarine is served.

All packages containing oleomargarine must be branded as such in ordinary boldfaced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pica

in size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrappped for sale.

Oleomargarine must not contain artificial coloring matter.

Pancake Flours.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

Pepper.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

Prepared Mustard.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared

Mustard" and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer.

Renovated Butter.—All packages containing same sold, offered or exposed fo sale, or in possession with intent to sell, must be labeled "Renovated Butter."

Packages put up for immediate delivery shall be covered by wrappers on which must be printed the words "Renovated Butter," in Gothic letters at least three-eighths of an inch square, and such wrappers shall contain no other words or printing thereon and said words "Renovated Butter" so printed shall not be in any manner concealed.

If packed in tubs or other receptacles the words "Renovated Butter," must be printed in Gothic letters at least three-eighths of an inch square on two sides of the same.

If uncovered or not in a case or package a placard containing said words in the same form as above described shall be attached to the mass in such a manner as to be easily seen and read by the purchaser.

Saccharine.—The use of saccharine in all food products is prohibited.

Syrups.—Syrup mixed with glucose must be distinctly branded or labeled "Glucose Mixture" or "Corn Syrup" in plain Gothic type not less than three-eighths of an inch square. It shall also have the name and percentage by weight of each ingredient contained therein plainly stamped, branded or stenciled on each package in plain Gothic letters not less than one-quarter of an inch square. Every package of syrup, either simple or mixed, shall bear the name and address of the manufacturer. It shall have no other designation or brand that represents or is the name of any article which contains a saccharine substance and all brands or labels shall be an inseparable part of the general or distinguishing label which shall be that principal and conspicuous sign under which it is sold.

Spices.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package be labeled mixture or compound. (See pepper.)

Sweet Chocolates and Sweet Cocoas.—If containing no other substances than cocoa mass, and not to exceed 60 per cent of sugar and flavoring, will not be classed as a compound or mixture.

Vinegar.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT



BY AUTHORITY

Lansing Michigan Bobert Smith Printing Co., State Printers and Binders 1903

STATE OF MICHIGAN

DAIRY AND FOOD DEPARTMENT

LANSING

A. W. SMITH, -		-	-	-		 Commissioner
PERLEY C. HEALD,	-		-	-	-	DEPUTY COMMISSIONER
R. E. DOOLITTLE,	_	_	_	_	_	- State Analyst

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1903.

Cases pending july 1, 1903	5
CASES DISPOSED OF.	
Before examining magistrates: Defendants bound over to trial courts	1
Defendants discharged on examination	0
Defendants convicted	4
Defendants acquitted	0
Cases pending November 1, 1903	16

PROCEEDINGS HAD DURING THE MONTH OF OCTOBER.

Complaint was made on October 2, in justice court of the city of St. Joseph against David J. Stewart, charged with selling adulterated pepper. Defendant entered a plea of not guilty, waived examination, and was bound over to the December term of the circuit court for trial.

Complaint was made October 12, in police court of the city of Grand Rapids against Benjamin S. Harris, charged with selling corn syrup not properly labeled. In police court, October 12, defendant convicted; case appealed: In circuit court in and for Kent county, October 16, 1903, defendant tried by jury and convicted; case appealed to supreme court. In supreme court case set for hearing November 3, 1903.

PROSECUTIONS.

SINCE BEGINNING OF FISCAL YEAR, JULY 1, 1903.

Cases pending July 1, 1903	
CASES DISPOSED OF.	
Before examining magistrates: Defendants bound over to trial courts Defendants discharged on examination	
In trial courts: Defendants convicted Defendants acquitted Cases pending January 1, 1904	

PROCEEDINGS HAD DURING THE MONTH OF DECEMBER.

In the case pending in the circuit court in and for the county of Berrien, against David J. Stewart, charged with selling adulterated pepper, December 7th case nolle prossed on motion of the prosecuting attorney

owing to defective complaint.

In the case pending in the superior court of the city of Grand Rapids, against John De Boe, of the firm of De Boe, King & Co., charged with selling extract of lemon containing wood alcohol, a substance poisonous and injurious to health. December 24th defendant tried by jury and convicted. A fine of \$300.00 was imposed by the court and that the defendant stand convicted to the county jail until the same is paid, not exceeding a period of ninety days.

Complaint was made December 7th in police court of the city of Grand Rapids against John De Boe of the firm of De Boe, King & Co., charged with selling extract of vanilla containing wood alcohol, a substance poisonous and injurious to health. Date of examination December 19th, 1903. December 19th defendant bound over to the superior court of the city of

Grand Rapids for trial.

CHEMIST'S REPORT.

Department Laboratory, Lansing, Mich., Dec. 31, 1903.

Hon. A. W. Smith, Dairy and Food Commissioner:

Sir—During the month of December, 91 samples of food products have been examined, 31 being pure and 60 adulterated.

R. E. DOOLITTLE, State Analyst.

SUMMARY.

Article.	Totals.	Not found adulter- ated.	Found adulter- ated.
Buckwheat Flour Compound. Cream of Tartar. Chocolate and Cocoa. Extracts (flavoring). Honey. Jelly, Preserves, etc. Mace. Mace. Maple Cream Mixtures and Compounds. Molasses Mustard. Pepper. Syrup. Vinegar.	2 8 10 42 1 7 1 1 1 1 1 1 5	0 0 3 12 1 0 0 0 1 0 0 1 0	23 77 30 0 77 1 1 6 1 1 1
Totals.	91	31	60

It should not be inferred from an examination of the figures presented in the above table that they represent the actual condition of the food supply of Michigan with reference to adulteration. The experience of the department's inspectors enables them to readily determine as to the purity of many of the different food products inspected by them. Only samples supposed to be adulterated or in which some new form of adulteration is liable to appear are sent to the department's laboratory for chemical analysis.

ANALYSIS OF SAMPLES.

BUCKWHEAT FLOUR COMPOUND.

pound," from F. S. Gray, Holland. Sold by Musselman Grocer Co., Grand Rapids, Mich. Producer, Tripaul Manufacturing Co., Elkhart, Ind.	Buckwheat Flour Com-
Buckwheat flour	
Wheat	
Corn	
Leavening and sait	
rackage not properly labeled.	
No. R-332. Sample of "Compound Self Raising Buckwhe Producer, The H-O Company, New York, N. Y.	at."
Buckwheat flour	
Wheat	
Corn	
Leavening and salt	
Package not properly labeled.	
CREAM OF TARTAR.	
No. K-470. Sample of cream of tartar (Brand "A. A."), New Buffalo. Sold by Kramer & Sons, IaPorte, Ind. Producer, Western Mills, Chicago, Ill.	, from Anderson Bros.,
Cream of tartar Corn starch Lime (as CaO) Phosphates (as P ₂ O ₄) Sulphates (as S O ₃) Water, etc	11.10 per cent 11.80 " " 7.60 " "
Sample is a mixture of corn starch and pohsphates and	sulphate of lime.
No. I-444. Sample of cream of tartar ("Century" brand Grand Rapids. Sold by The Manhattan Specialty Mnf'g Co., New York,	
Cream of tartar	. None
Corn starch	
I ime (as CaO)	4.75 " "
Soda (as Na, O)	3.89
Alumina (as Al ₂ O ₃)	4.00
Phosphates (as P , O_s) Sulphates (as SO_s)	0.77
Carbon dioxide, water, etc.	1.74
Sample is a mixture of corn starch, alum, phosphate of	lime and soda.

No. S-348. Sample of cream of tartar, from L. W. Humphry, Detroit. Producer, Manhattan Specialty Mnf'g Co., New York, N. Y.

Cream of tartar	None		
Corn starch	11.92	per	cent
Lime (as CaO)	5.16	- 44	44
Phosphates (as P, O ₂)	6.90	"	**
Sulphates (as SO ₃)	16.22	44	44
Alumina (as Al, O_2)	4.68		44
Soda (as Na ₂ O)	5.09	**	44
Carbon dioxide, water, etc			

Sample is a mixture of corn starch, alum, phosphate of lime and soda.

CHOCOLATE AND COCOA.

No. K-479. Sample of "Emile Ader's No. 1 Premium Chocolate," from M. M. Lee, Battle Creek.

Producer, Emile Ader, New York, N. Y.

Water			
Ash	2.98	44 44	
Total starch		"	
Ether extract (fat)	12.88	**	
Crude fiber	2.80	** **	

Adulterated with a product of wheat.

No. K-480. Sample of "Justice Brand Chocolate," from C. B. Whipple, Battle Creek.

Producer, Wm. H. Baker, Syracuse, N. Y.

Water	4.16	per	cent
Ash	3.16	-11	**
Total starch	15.97	**	**
Ether extract (fat)	38.72	66	**
Crude fiber	2.99	"	"

Adulterated with a product of wheat.

No. K⁴93. Sample of "Swiss Milk Chocolate," from J. Anderson, Muskegon. Sold by Durand, Kasper & Co., Chicago, Ill.

Producer, Croft and Allen Co., Philadelphia, Pa.

Water	0.78 per	cent
Ash	1.26 "	"
Starch		
Ether extract (fat)	25.59 "	44
Sugar		
Nitrogenous matter (Nx6.25)	5.18 "	**
Crude fiber	0.74 "	44

Sample is a mixture of chocolate, sugar and milk preparation. Not properly labeled.

No. K-494. Sample of Croft's Swiss Milk Cocoa," from J. Anderson, Muskegon. Sold by Durand, Kasper & Co., Chicago, Ill.

Water		
Ash	3.98 "	44
Starch		
Ether extract (fat)		44
Sugar		
Crude fiber	2.90 "	"
Nitrogenous matter (Nx6.25)	15.37 "	"

Sample is a mixture of cocoa, sugar and milk preparation. Not properly labeled.

Sold by Dow and Snell, Toledo, Ohio.	. Harter, R	
Water	5.60 per	cent
Ash	4.40	"
Total starch	13.27 " 3 1.94 "	"
Ether extract (fat)	3.85 "	4
	0.00	
Adulterated with a product of wheat.		
No. S-351. Sample of "Justice Brand Chocolate."		
Sold by E. E. Harley, Dayton, Ohio.		
Producer, William H. Baker, Syracuse, N. Y.		
Water	3.42 per	
Ash	4.33	44 44
Total starch	10.40	"
Ether extract (fat)	40.01	"
Crude fiber	2.80 "	
Adulterated with a product of wheat.		
No. S-360. Sample of "Admiral Cocoa," from Lee and Cac Producer, Hub Cocoa Works, Boston, Mass.	ly, Detroit.	
Water	3.88 per	cent
Ash	3.14 "	"
Starch	Trace	
Sugar	59.04 "	44
Ether extract (fat)	3.29 "	64
Crude fiber	3.89 "	**
Not properly labeled.		
EXTRACTS, (flavoring).		•
Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich.		
Specific gravity	0.80232	
Solids	_0.04 per	cent
Methyl (wood) alcohol		
	Present	
Lemon oil	4.40 "	"
Color (artificial)		
	4.40 "	
Color(artificial)	4.40 " Yellow coa	l tar dye
Color (artificial)	4.40 " Yellow coa	l tar dye
Color (artificial)	4.40 " Yellow coa ract Vanilla	l tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. toos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids	4.40 " Yellow coa	l tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. toos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash	4.40 "Yellow coa ract Vanilla	l tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. cos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 "	l tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. cos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash	4.40 "Yellow coaract Vanilla 5.87 per 0.07 " 4.70 "	tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. 1008, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight)	4.40 "Yellow coaract Vanilla 5.87 per 0.07 " 4.70 " 19.93 "	tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. 1008, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 " 4.70 " 19.93 " Present	tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. toos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 "4.70 "19.93 "Present 0.25 "	tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. toos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol Vanillin Coumarin Contains methyl (wood) alcohol. No. K-490. Sample of "Dragon Brand Extract Lemon," fr Sold by De Boe, King & Co., Grand Rapids, Mich.	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 " 4.70 " 19.93 "Present 0.25 "None	tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. toos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol Vanillin Coumarin Contains methyl (wood) alcohol. No. K-490. Sample of "Dragon Brand Extract Lemon," fr Sold by De Boe, King & Co., Grand Rapids, Mich. Producer, Michigan Chemical Co., Grand Rapids, Mich.	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 "4.70 "19.93 "Present 0.25 "None com A. Roos	tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. toos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol Vanillin Coumarin Contains methyl (wood) alcohol. No. K-490. Sample of "Dragon Brand Extract Lemon," In Sold by De Boe, King & Co., Grand Rapids, Mich. Producer, Michigan Chemical Co., Grand Rapids, Mich. Specific gravity	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 "4.70 "19.93 "Present 0.25 "None com A. Roos 0.94454	tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. toos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol Vanillin Coumarin Contains methyl (wood) alcohol. No. K-490. Sample of "Dragon Brand Extract Lemon," fr Sold by De Boe, King & Co., Grand Rapids, Mich. Producer, Michigan Chemical Co., Grand Rapids, Mich. Specific gravity Solids	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 "4.70 "19.93 "Present 0.25 "None 0.94454 0.07 per	tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. toos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol Vanillin Coumarin Contains methyl (wood) alcohol. No. K-490. Sample of "Dragon Brand Extract Lemon," In Sold by De Boe, King & Co., Grand Rapids, Mich. Producer, Michigan Chemical Co., Grand Rapids, Mich. Specific gravity Solids Total alcohol (by weight)	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 "4.70 "19.93 "Present 0.25 "None com A. Roos 0.94454 0.07 per 37.02 "	tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. toos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol Vanillin Coumarin Contains methyl (wood) alcohol. No. K-490. Sample of "Dragon Brand Extract Lemon," fr Sold by De Boe, King & Co., Grand Rapids, Mich. Producer, Michigan Chemical Co., Grand Rapids, Mich. Specific gravity Solids Total alcohol (by weight) Methyl (wood) alcohol	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 " 4.70 " 19.93 "Present 0.25 "None com A. Roos 0.94454 0.07 per 37.02 "Present	tar dye ," from cent " " " s, Hollan
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. toos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol Vanillin Coumarin Contains methyl (wood) alcohol. No. K-490. Sample of "Dragon Brand Extract Lemon," fr. Sold by De Boe, King & Co., Grand Rapids, Mich. Producer, Michigan Chemical Co., Grand Rapids, Mich. Specific gravity Solids Total alcohol (by weight) Methyl (wood) alcohol Lemon oil	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 "4.70 "19.93 "Present 0.25 "None com A. Roos 0.94454 0.07 per 37.02 "Present None	tar dye
Color (artificial) Contains methyl (wood) alcohol. No. K-489. Sample of "De Boe's Double Concentrated Ext. Coos, Holland. Sold by De Boe, King and Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol. Vanillin Coumarin Contains methyl (wood) alcohol. No. K-490. Sample of "Dragon Brand Extract Lemon," In Solid by De Boe, King & Co., Grand Rapids, Mich. Producer, Michigan Chemical Co., Grand Rapids, Mich. Specific gravity Solids Total alcohol (by weight) Methyl (wood) alcohol Lemon oil Color (artificial) Contains methyl (wood) alcohol	4.40 "Yellow coa ract Vanilla 5.87 per 0.07 " 4.70 " 19.93 "Present 0.25 "None com A. Roos 0.94454 0.07 per 37.02 "Present	tar dye ," from cent " " s, Hollan cent

```
No. K-495. Sample of De Boe's "Double Concentrated Extract Lemon," from
Chris Walkerson, Muskegon.
 Sold by Geo. Hume & Co., Muskegon, Mich.
 Producer, De Boe, King & Co., Grand Rapids. Mich.
    Specific gravity .....
                                       0.80152
    Solids ......
                                       0.08 per cent
    Methyl (wood) alcohol .....
                                      Present
   4.60 "
                                      Yellow coal tar dye
 Contains methyl (wood) alcohol.
 No. K-496. Sample of "De Boe's Double Concentrated Extract Vanilla."
 Sold by Geo. Hume & Co., Muskegon, Mich.
 Producer, De Boe, King & Co., Grand Rapids, Mich.
                                       5.87 per cent
    Solids .....
                                       0.10
    "
    Sugar .......
                                       4.85
    Total alcohol (by weight) 19.58 "
Methyl (wood) alcohol Present
Vanillin 0.22 "
Coumarin None
    Color ...... Foreign
 Contains methyl (wood) alcohol.
 No. K-497. Sample of "De Boe's Full Measure Extract of Vanilla and Tonka,"
 Sold by Geo. Hume & Co., Muskegon, Mich.
Producer, De Boe, King & Co., Grand Rapids, Mich.
    Solids .....
                                      10.40 per cent
    Ash ......
                                       0.30
                                       9.70 "
    Sugar .....
                                      11.75 "
                                             ..
    Total alcohol (by weight) .....
    Methyl (wood) alcohol .....
                                      Present
                                      0.02 "
    Vanillin .....
                                       0.03 "
    Coumarin ......
 Contains methyl (wood) alcohol.
 No. L-439. Sample of "Acme Special Concentrated Extract of Vanilla," from
S. T. Johnson Co., Reed City.
 Producer, Acme Extract Co., (Foote & Jenks, Proprietors), Jackson, Mich.
   Solids ...... 13.82 per cent
                                      0.03 "
23.62 "
   Ash ..............
    Alcohol (by weight)
   Sugar ...... 10.00 "
                                             "
                                       0.07 "
   Vanillin .....
   Coumarin .....
                                       0.14
   Color, artificial ...... Coal tar dye
 Contains coumarin and artificial coloring matter.
 No. L-440. Sample of "Peerless Extract Vanilla and Tonka," from Judson
Grocer Co., Grand Rapids.
 Producer, De Boe, King & Co., Grand Rapids, Mich.
   Solids .....
                                      10.72 per cent
                                      0.04 "
   Ash .....
   Total alcohol (by weight)
                                      11.79
   Methyl (wood) alcohol .....
                                      Present
                                      9.85 "
   Sugar .....
                                       0.02 "
   Vanillin .....
                                             **
                                      0.08 "
   Coumarin .....
 Contains methyl (wood) alcohol.
```

•	
No. L-441. Sample of "De Boe's Double Concentrated 1 from Judson Grocer Co., Grand Rapids. Producer, De Boe, King & Co., Grand Rapids, Mich.	Extract Wintergreen,"
Specific gravity Solids Ash Total alcohol (by weight) Methyl (wood) alcohol Color (artificial)	0.94758 0.12 per cent 0.03 " " 20.43 " " Present - Red coal tar dys
Contains methyl (wood) alcohol.	
No. L-442. Sample of "Peerless Extract Vanilla," from Jud Rapids. Producer, De Boe, King & Co., Grand Rapids, Mich.	son Grocer Co., Grand
Solids Ash Sugar Total alcohol (by weight) Methyl (wood) alcohol Vanillin Coumarin Contains methyl (wood) alcohol.	6.12 per cent 0.06 " " 5.00 " " 19.12 " " Present 0.26 " " None
No. L-443. Sample of "De Boe's Double Concentrated Extr Judson Grocer Co., Grand Rapids. Producer, De Boe, King & Co., Grand Rapids, Mich. Specific gravity Solids Ash Total alcohol (by weight) Methyl (wood) alcohol Color(artificial) Contains methyl (wood) alcohol.	0.94835 0.03 per cent 0.01 " " 21.53 " " Present Yellow coal tar dye
No. R-326. Sample of "De Boe's Double Concentrated Ext Sold by Tanner & Daily, West Bay City, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich. Specific gravity Solids Lemon oil Methyl (wood) alcohol Color(artificial)	0.80299 0.08 per cent 4.25 " " Present Yellow coal tar dye
No. R-327. Sample of "De Boe's Full Measure Pure Concent from Kelley & Co., Bay City. Producer, De Boe, King & Co., Grand Rapids, Mich. Specific gravity Solids Total alcohol (by weight) Methyl (wood) alcohol Color(artificial)	0.95377 0.06 per cent 32.21 " " Present Yellow coal tar dye

Contains methyl (wood) alcohol.

No. R-328. Sample of "De Boe's Cream Vanilla Extract,	" from Kelley & Co.,	
Bay City. Producer, De Boe, King & Co., Grand Rapids, Mich.		
SolidsAsh	15.38 per cent 0.01 " "	
Sugar Total alcohol (by weight) Methyl (wood) alcohol	15.00 " " 10.33 " " Present	
Vanillin	Trace 0.05 " " Foreign	
Contains methyl (wood) alcohol, coumarin and foreign co	oloring matter.	
No. R-330. Sample of "Dieter's Double Vanilla Flavoring Marlette. Sold by Phipps, Penoyer & Co., Saginaw, Mich. Producer, The J. P. Deiter Co., Chicago, Ill.	g," from J. L. Curry,	
Solids	19.70 per cent 0.24 " "	
Sugar	13.73 " " 9.43 " "	
VanillinCoumarin	0.43 " " None	
Color, artificial	Coal tar dye	
No. U-15. Sample of De Boe's Double Concentrated E Quincy Co-operative Mercantile Co., Hancock. Producer, De Boe, King & Co., Grand Rapids, Mich.	xtract Vanilla," from	
Solids	6.30 per cent 0.12 " "	
Sugar Total alcohol (by weight)	5.08 " " 21.09 " "	
Methyl (wood) alcohol	Present	
Coumarin Color	None Foreign	
Contains methyl (wood) alcohol.	_	
No. U-16. Sample of "De Boe's Double Concentrated E Quincy Co-operative Mercantile Co., Hancock. Producer, De Boe, King & Co., Grand Rapids, Mich.	Extract Lemon," from	
Specific gravity	0.91899 0.06 per cent	
Total alcohol (by weight) Methyl (wood) alcohol	46.70 " " Present	
Lemon oil		
Contains methyl (wood) alcohol.	Tollow coal tai dye	
No. U-17. Sample of "Scal Extract of Vanilla," from Quincy Co-operative Mercantile Co., Hancock. Producer, Kenwood Preserving Co., Chicago, Ill.		
Solids	12.02 per cent	
Ash	0.12 " " 8.43 " "	
Alcohol (by weight) Vanillin Coumarin	14.08 " " 0.33 " " None	
Color	Foreign	

Not true vanilla extract.

No. U-19. Sample of "De Boe's Full Measure Extract of from D. Crowley, Hancock. Producer, De Boe, King & Co., Grand Rapids, Mich.	Vanilla and Tonks,"
	10 97 non cent
Solids	10.27 per cent 0.04 " "
Sugar	9.78 " "
Total alcohol (by weight)	12.93 " "
Methyl (wood) alcohol	Present
Vanillin	0.02 " "
Coumarin	0.04 " "
Contains methyl (wood) alcohol.	
No. U-24. Sample of "De Boe's Double Concentrated Extrac Reed & Co., Michigamme. Sold by De Boe, King & Co., Grand Rapids, Mich. Producer, De Boe, King & Co., Grand Rapids, Mich.	et Vanilla," from F. W.
Solids	7.54 per cent
Ash	0.0 ž " "
Sugar	
Total alcohol (by weight)	19.57 " "
Methyl (wood) alcohol Vanillin	Present 0.16 " "
Coumarin	None
Color	Foreign
Contains methyl (wood) alcohol.	
Contains methy (wood) account	
No. U-25. Sample of "De Boe's Double Concentrated Ext Richards, Marquette. Producer, De Boe, King & Co., Grand Rapids, Mich. Specific gravity Solids Total alcohol (by weight) Methyl (wood) alcohol Lemon oil Color(artificial) Contains methyl (wood) alcohol.	0.93181 0.06 per cent 45.60 " " Present None
No. U-26. Sample of "De Boe's Double Concentrated Extra	ct Vanilla," from John
Siegel, Marquette. Producer, De Boe, King & Co., Grand Rapids, Mich.	
Solids	6.12 per cent
Ash	0.06 " "
Sugar	5.22 " "
Total alcohol (by weight)	19.46 " "
Methyl (wood) alcohol	Present 0.22 " "
Coumarin	None
	110110
Contains methyl (wood) alcohol.	
No. U-27. Sample of "De Boe's Double Concentrated Extra Siegel, Marquette. Producer, De Boe, King & Co., Grand Rapids, Mich.	ct Lemon," from John
Specific gravity	0.80201
Solids	0.06 per cent
Methyl (wood) alcohol	Present
Lemon oll	4.20 " "
Color(artificial)	Yellow coal tar dye
Contains methyl (wood) alcohol.	

No. U-28. Sample of "De Boe's Double Concentrated Extra ert Reinhardt, Marquette.	et Vanilla," from Rob-
Producer, De Boe, King & Co., Grand Rapids, Mich.	
Solids	6.00 per cent 0.06 " "
Sugar	4.92 " "
Total alcohol (by weight)	19.50 " "
Methyl (wood) alcohol	Present 0.22 " "
Coumarin	None
Contains methyl (wood) alcohol.	:
No. U-29. Sample of "De Boe's Double Concentrated Extra ert Reinhardt, Marquette. Producer, De Boe, King & Co., Grand Rapids, Mich.	ct Lemon," from Rob-
Specific gravity	0.93465
Solids	0.07 per cent
Total alcohol (by weight)	44.80 " " Present
Lemon oil	None
Color(artificial)	Yellow coal tar dye
Contains methyl (wood) alcohol.	•
No. U-31. Sample of "De Boe's Extract of Vanilla and T Bros., Negaunee. Producer, De Boe, King & Co., Grand Rapids, Mich.	Conka," from Mitchell
Solids	10 00
Ash	10.00 per cent
Sugar	9.60 " "
Total alcohol (by weight)	11.80 " "
Methyl (wood) alcohol	Present
Coumarin	0.04 " "
Contains methyl (wood) alcohol.	
No. U-32. Sample of "De Boe's Double Concentrated E Joseph J. Leffler, Ishpeming. Producer, De Boe, King & Co., Grand Rapids, Mich.	xtract Lemon," from
Specific gravity	0.93284
Solids Total alcohol (by weight)	0.06 per cent 45.12 " "
Methyl (wood) alcohol	Present
Lemon oil	None
Color(artificial)	Yellow coal tar dye
Contains methyl (wood) alcohol.	
No. U-33. Sample of "De Boe's Double Concentrated E: Joseph J. Leffler, Ishpeming. Producer, De Boe, King & Co., Grand Rapids, Mich.	ktract Vanilla," from
Solids	5.96 per cent
Ash	0.07 " "
Sugar Total alcohol (by weight)	5.00 " " 19.50 " "
Methyl (wood) alcohol	Present
Vanillin	0.24 " "
Coumarin	None
Color	Foreign
Contains methyl (wood) alcohol.	:

No. U-34. Sample of "De Boe's Double Concentrated Extra liam Anderson & Co., Ishpening. Producer, De Boe, King & Co., Grand Rapids, Mich.	ct Lemon," from Wil
	0.00461
Specific gravity	0.80461
Methyl (wood) alcohol	0.15 per cent Present
Lemon oil	6.00 " "
Contains methyl (wood) alcohol.	0.00
• • •	
No. U-35. Sample of "De Boe's Double Concentrated E	xtract Vanilla," from
William Anderson & Co., Ishpeming. Producer, De Boe, King & Co., Grand Rapids, Mich.	
Solids	6.78 per cent
Ash	0.16 per cent
Sugar	5.00 " "
Total alcohol (by weight)	19.12 " "
Methyl (wood) alcohol	Present
Vanillin	0.24 " "
Coumarin	None
Contains methyl (wood) alcohol.	
	•
JELLY, PRESERVES, ETC.	
No. K-481. Sample of "Strawberry Jelly," from C. S. Bro	wn. Battle Creek.
Sold by Godsmark, Durand & Co., Bittle Creek, Mich.	,
Producer, Alemeda Packing Co., Cincinnati, Ohio.	
Solids	67.78 per cent
Ash	0.55 " "
Reducing sugar	40.30 " "
Sucrose	25.22 " "
Glucose	Present
Polarization direct at 20° C	
Polarization invert at 20° C	
Preservative	
Color (artificial)	
Imitation fruit jelly colored.	
No. K-485. Sample of "Currant Jelly" ("Silver Seal" brand), from H. W. Vander
Lei, Holland. Sold by Walsh, Boyle & Co., Chicago, Ill.	
Producer, Walsh, Boyle & Co., Chicago, Ill.	
Solids	66.78 per cent
Ash	0.48 " "
Reducing sugar	37.65 " "
Sucrose	7.81 " "
Glucose	Present
Polarization direct	
Polarization invert	-03.1
Color (artificial)	red coar car dye
No. U 6. Sample of "Chicago Best Quality Guaranteed Pure	e Currant Jelly," from
H. W. Eave & Co., Baltic.	
Sold by Stecle Wedeles Co., Chicago, Ill.	
Solids	74.50 per cent
Ash	0.24 " "
Reducing sugar	55.48
Sucrose	7.00
Glucose	None
Polarization invert	
Color (artificial)	Red coal tar dye
Not made from currant juice.	The come was also
-100 mode from currant juice.	

```
No. U-7. Sample of "Savoy Brand Red Rasberry Preserves," from H. W. Eave &
Co., Baltic.
 Sold by Steele Wedeles & Co., Chicago, Ill.
                                      79.62 per cent
                                      0.36
   ..
   Reducing sugar .....
                                      48.89
                                          ..
   Sucrose ......
                                      5.21
   Glucose .....
                                     Present
   Polarization direct ......+77.2 degrees
   Polarization invert ......+70.2
   Fruit ..... Present
   Color (artificial) ...... Red coal tar dye
 Imitation fruit preserves colored.
 No. U-11. Sample of "Campbell's Currant Jelly," from S. E. Syales, Greenland. Sold by E. M. Lieblien, Hancock, Mich.
 Producer, Joseph Campbell Preserve Co., Camden, N. J.
   Solids ......
                                      67.14 per cent
                                      0.25
   Ash ...............
   Reducing sugar .....
                                      43.80

      Sucrose
      17.48 " "

      Glucose
      None

      Polarization direct
      +13.2 degrees

   Preservative Benzoic acid
Color (artificial) Red coal tar dye
 Not from currant juice.
 No. U-21. Sample of "Imitation Rasberry Preserve," from S. D. North & Son,
Quincy Mine.
                                      71.79 per cent
   Solids ......
   Ash ............
                                      0.77
                                             "
                                          •
   Reducing sugar .....
                                      35.38
   Sucrose ....
                                      2.23
   Glucose ...... Present
   Polarization direct .....+106.0 degrees
   Polarization invert .....+103.0
   Preservative Benzoic acid
Color (artificial) Red coal tar dye
 Imitation fruit jam colored.
 No. U-30. Sample of "Currant Pure Fruit Jelly," from Geo. J. Haupt, Negaunee.
 Sold by Reid, Murdock & Co., Chicago, Ill.
 Producer, Reid, Murdoch & Co., Chicago, Ill.
   Solids .....
                                      63.70 per cent
   Ash .....
                                      0.31
   Reducing sugar .....
                                      47.67
   Sucrose ........
                                      11.74
   Glucose ..... None
   Polarization invert .....-20.5
   Preservative ...... Benzoic acid
   Color (artificial) ...... Red coal tar dye
 Not made from currant juice.
```

MACE.
No. S-349. Sample of ground mace, from Paul Bock, Detroit. Sold by Manhattan Specialty Co., New York, N. Y. Producer, Manhattan Specialty Co., New York, N. Y.
Water 8.55 per cent
Total ash
Sulphate of lime (Ca SO ₄)
Volatile ether extract
Non-volatile ether extract 2.94 " "
Crude fiber
Adulterated with a wheat product (probably cracker crumbs) and suiphate of lime.
MAPLE CREAM.
No. K-474. Sample of "Robinson & Co.'s Maple Cream," from Herr Bros., Benton
Harbor, Mich.
Producer, Robinson & Co., Meddlefield, Ohio.
Solids 84.28 per cent Ash 0.46 " "
Sucrose 80.30 " "
Not properly labeled as a mixture or compound.
MOLLASSES.
No. L-436. Sample of molasses ("Sweet Home" brand), from D. C. Harter, Reed
City. Sold by National Molasses Co., St. Louis, Mo.
Solids 77.18 per cent
Ash 2.69 " "
Sucrose
Polarization direct+99.8 degrees
Polarization invert+69.3 "
Contains glucose.
MUSTARD.
No. U-22. Sample of mustard ("Telmo" brand), from P. Brennan, L'Anse.
Sold by Franklin Mac Veagh & Co., Chicago, Ill. Producer, Franklin MacVeagh & Co., Chicago, Ill.
Ash 6.06 per cent
Mustard
Turmeric
Colored with turmeric.
PEPPER.
No. K-478. Sample of black pepper ("Legal Standard" brand), from P. S. Evans, Battle Creek.
Sold by John A. Tollman, Chicago, Ill. Water
Total ash
Ash insoluble in 10% hydrochloric acid (sand) 2.16 " "
Starch
Voiatile ether extract
Non-volatile ether extract
Does not comply with standard for black penper.

Does not comply with standard for black pepper.

Digitized by Google

No. K-484. Sample of "Pure Black Pepper," from R. A. Kanters & Co., Holland. Sold by Kidd, Dater & Price, Benton Harbor, Mich.

Water	8.04	per	cent
Total ash	8.43		
Ash insoluble in 10% hydrochloric acid (sand)	1.82	"	**
Starch	19.46	46	66
Volatile ether extract	1.53	"	**
Non-volatile ether extract	6.76	"	46
Crude fiber	19.41	"	44

Does not comply with standard for black pepper.

No. K-487. Sample of black pepper, from G. J. Boone & Co., Zeeland. Sold by Edwin J. Gillies & Co., New York, N. Y.

Water	7.55	Der	cent
Total ash	8.91	-"	**
Ash insoluble in 10% hydrochloric acid (sand)	1.57	"	66
Starch	13.84	66	"
Volatile ether extract	1.39	**	"
Non-volatile ether extract	6.05	46	"
Crude fiber	21.12	**	66

Does not comply with standard for black pepper.

No. L-470. Sample of black pepper ("Charm" brand), from G. E. Tripp, Ludington.

Sold by Franklin Mac Veagh & Co., Chicago, Ill.

Water	7.45	per	cent
Total ash	10.81	~"	"
Ash insoluble in hydrochloric acid (sand)	3.80	"	
Starch	19.18	66	**
Volatile ether extract			66
Non-volatile ether extract	0.38	**	
Crude fiber	20.43	**	"
·			

Does not comply with standard for black pepper.

No. S-355. Sample of black pepper ("L & C" brand), from Lee and Cady, Detroit. Producer, E. R. Durkee & Co., New York, N. Y.

Water	8.67	per	cent
Total ash	7.21	-"	**
Ash insoluble in 10% hydrochloric acid (sand)	1.36	"	66
Starch			66
Volatile ether extract	2.29	66	44
Non-volatile ether extract	8.95	"	"
Crude fiber	17.67	**	"

Does not comply with standard for black pepper.

SYRUP.

No. K-483. Sample of "Holly Syrup," from I. A. Tucker, Fennville. Sold by Walsh, Boyle & Co., Chicago, Ill. Producer, Walsh, Boyle & Co., Chicago, Ill.

Solids	
Ash	0.46 " "
Sucrose	28.73 " "
Glucose	
Polarization direct	
Polarization invert	+73.3 "

Contains glucose.

VINEGAR.

No. K-482. Sample of cider vinegar ("Red Star" brand), f pleton, Battle Creek. Sold by The Leroux Cider and Vinegar Co., Toledo, Ohio. Producer, The Leroux Cider and Vinegar Co., Toledo, Ohio.	-
Specific gravity Acid, as acetic	
Solids	1.45 " "

Below the standard in solids and in ash.

INSPECTIONS.

The following places were visited by the department's inspection force

during the month of December:

Ann Arbor, Baraga, Battle Creek, Bay City, Boston Mine, Brown City, Charlotte, Delray, Detroit, Dollar Bay, Dowagiac, Fennville, Franklin Mine. Galesburg, Grand Rapids, Greenland, Hancock, Holland, Ishpeming, L'Anse. Ludington, Manchester, Marlette, Marquette, Mayville, Michigamme, Muskegon, Negaunee, Quincy Mine, Reed City, Rockland, Saginaw, Saugatuck, Vassar, West Bay City, Wyandotte, Yale, Ypsilanti and Zeeland.

DAIRY INSPECTIONS.

Reports of dairies inspected during the month of December.

At Battle Creek:

- C. Convis—Number of cows, 18; condition, good; feed, corn fodder, ground corn and oats and barley bran; stables, fair and fairly clean; no light or ventilation; yard, fairly clean; water, well. Sells to B. H. White. Holstein, Durham and Jersey grades.
- J. M. Willison—Number of cows, 19; condition, good; feed, hay, ensilage, beet pulp and bran; stables. fair and fairly clean; poor light and ventilation; yard, fairly clean with fair drainage; water, well. Sells milk to B. H. White. Jerseys and Jersey and Durham grades.
- P. S. Evans—Number of cows, 11; condition, good and clean; feed, ensilage, hay, bran, ground corn and oats; stables, good and clean; good light and ventilation; yard, dry and clean, fair drainage; water, well. Sells milk to B. H. White. Durham and Jersey grades.
- W. K. Adams—Number of cows, 8; condition, extra good and clean; feed, ensilage, corn fodder and corn; stables good and clean; light, good; ventilation, good; yard, dry and clean, good drainage; water, well. Sells milk to B. H. White. Jersey and Durham grades.
- S. E. Woodworth—Number of cows, 27; condition, good and clean; feed, hay ensilage, ground corn and oats; stables, good and clean, light and ventilation good; yard, dry and clean, good drainage; water, well. Sells milk to Brown. Jerseys and Jersey grades.

- C. M. Woodworth—Number of cows, 6; condition, good and clean; feed, hay, ground corn and oats; stables, good and clean; good light and ventilation; yard, dry and clean, good drainage; water, well. Sells milk to Brown. Thoroughbred Jerseys.
- B. Haskins—Number of cows, 14; condition, good and clean; feed, hay, stover, ground corn and oats; stables, good and clean, light and ventilation good; yard, fairly clean, good drainage; water, well. Sells milk to S. Haskins. Jersey and Durham grades.
- M. Minty—Number of cows, 8; condition, good and clean; feed. hay, ensilage, ground corn, oats and bran; stables, good and clean; good light and ventilation; yard, dry and clean, good drainage; water, well. Sells to Battle Creek Sanitarium. Jersey and Durham grades.
- W. J. Beadle—Number of cows, 14; condition, good and clean; feed, hay, stover, ground corn, oats and bran; stables, good and clean; light, fair; ventilation, good; yard, dry and fairly clean, good drainage; water, well. Sells to M. P. Hanson. Jerseys and Jersey grades.
- J. M. Lamkey—Number of cows, 15; condition, good and clean; feed, hay, stover, cornmeal and bran; stables, good and fairly clean; light, good; ventilation, fair; yard, fair and fairly clean; water, well. Sells to Brown's creamery. Jersey and Durham grades.

Frank Sutphin—Number of cows, 18; condition, good and extra clean; feed, hay, ensilage, ground corn, oats and bran; stables, good and clean; light, fair; ventilation, good; yard, dry and clean, fair drainage; water, well. Sells to Battle Creek creamery. Jersey and Durham grades.

- O. W. Pratt—Number of cows, 9; condition, good and clean; feed, hay, ensilage, stover, cornmeal and bran; stables, good and clean; light, good; ventilation, fair; yard, fair and fairly clean; water, well. Sells to Battle Creek creamery. Jerseys and Jersey and Durham grades.
- O. P. Wells—Number of cows, 14; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; light, good; ventilation, fair; yard, dry and clean, good drainage; water, well. Sells to Brown's creamery. Jersey and Durham grades.
- A. G. Johnson—Number of cows, 14; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean; light, good; ventilation, fair; yard, fairly dry and clean; water, well. Sells to Brown's creamery. Jersey and Durham grades.
- J. M. Miller—Number of cows, 28; condition, extra good and clean; feed, hay, stover, bran, ground corn and oats; stables, good and thoroughly clean; good light and ventilation; yard, dry and clean, good drainage; water, well. Sells to Brown's creamery. Jerseys and Jersey and Durham grades.

Art Williams—Number of cows, 8; condition, good; feed, hay, stover, ground corn and oats; stables, fairly good and clean; light, good; ventila-

tion, poor; yard, dry and clean, good drainage; water, well. Sells to Battle Creek creamery. Jersey and Durham grades.

Benjamin Morgan—Number of cows, 40; condition, good and clean; feed, stover, ensilage, bran, ground corn and oats; stables, good and clean; light, good; ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Brown's creamery. Jerseys and Jersey and Durham grades.

Thomas Sprague—Number of cows, 20; condition, good and clean; feed, hay, ensilage, bran, ground corn and oats; stables, extra good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Battle Creek Sanitarium. Jerseys and Jersey and Durham grades.

- H. Hall—Number of cows, 12; condition, good; feed, hay, stover, bran and cornmeal; stables, fair and fairly clean; light, good; ventilation, fair; yard, dry and clean, fair drainage; water, well. Sells to Battle Creek Sanitarium. Durham and Holstein grades.
- C. F. Beach—Number of cows, 45; condition, good and clean; feed, hay, stover, ensilage, bran, ground corn and oats; stables, good and clean; good light and ventilation; yard, dry and clean, good drainage; water, well. Sells milk to Battle Creek Sanitarium. Jersey and Durham grades.
- M. Marshall—Number of cows, 18; condition, good and clean; feed, hay, stover, bran, ground corn and oats; stables, good and clean; good light and ventilation; yard, dry and clean, good drainage; water, well. Sells milk to G. P. Wolfe. Jersey and Durham grades.
- J. Reynolds—Number of cows, 40; condition, good and clean; feed, stover, ensilage, bran, ground corn and oats; stables, good and clean; good light and ventilation; yard, dry and clean, good drainage; water, well. Sells milk to Battle creek creamery. Jersey, Durham and Holstein grades.
- R. Gale. Number of cows, 15; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; light, fair; ventilation, good; yard, fairly dry and clean, fair drainage; water, well. Sells to Battle Creek creamery. Jersey and Durham grades.

Elias Newbree—Number of cows, 13; condition, good; feed, hay, stover, ground corn and oats; stables, fair but clean; light, good; ventilation, fair; yard, dry and fairly clean, fair drainage; water, well. Sells milk to Battle Creek creamery. Durham and Jersey grades.

- C. Hutchinson—Number of cows, 18; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; light and ventilation, fair; yard. fairly dry and clean; water, well. Sells to Battle Creek creamery. Durham and Jersey grades.
- H. P. Day—Number of cows, 20; condition, good; feed, ensilage, stover, bran, ground corn and oats; stables, good and clean; good light and ven-

tilation; yard, dry and clean, good drainage; water, well. Sells to Battle Creek creamery. Jersey and Durham grades.

J. Ulrich—Number of cows, 14; condition, good and clean; feed, hay, ensilage bran, ground corn and oats; stables, good and clean; fair light and ventilation; yard, fairly dry and clean, good drainage; water, well. Sells milk to Battle Creek creamery. Jersey and Durham grades.

Wm. Sprague—Number of cows, 31; condition, good and clean; feed, hay, stover, ensilage, bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells milk to Battle Creek Sanitarium. Jerseys and Jersey and Durham grades.

E. Hoyt—Number of cows. 10; condition, good; feed, hay, stover, bran, ground corn and oats; stables, fairly good and clean; light, good; yard, dry and fairly clean; water, well. Seils milk to Battle Creek creamery. Durham and Jersey grades.

Schmidt Bros.—Number of cows, 20; condition, good; feed, hay, ensilage, bran and cornneal; stables, good and clean; light, fair; ventilation, good; yard. dry and clean, good drainage; water, well. Sells to Battle Creek Sanitarium. Jersey and Durham grades.

- E. Gitchell—Number of cows. 6; condition, good; feed, hay, stover, bran, ground corn and cats; stables, fairly good and clean; light, fair; ventilation, good; yard, dry and clean, fair drainage; water, well. Sells to Battle Creek creamery. Jerseys and Jersey and Durham grades.
- E. Phillips—Number of cows, 8; condition, good; feed, hay, ensilage, bran and cornmeal; stables, fairly good and clean; light and ventilation, good; yard, dry and fairly clean. good drainage; water, well. Sells to Battle Creek creamery. Durham and Jersey grades.

Ed Sanford—Number of cows, 25; condition, good and clean; feed, stover, ensilage, bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, fairly dry and clean, good drainage; water, well. Retails. Jersey and Durham grades.

- Geo. R. Peet—Number of cows, 17; condition, good and clean; feed, hay stover, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Retails. Durham and Jersey grades.
- E. Andrews—Number of cows, 9; condition, good; feed. hav. stover, corn and bran; stables, fair and fairly clean; light, fair; ventilation, good; yard, dry and clean, good drainage; water, well. Sells milk to Utley. Jersey and Durham grades.

Eli Kline—Number of cows, 15; condition, good; feed, hay, ensilage, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells milk to Haskins. Durham and Jersey grades.

- B. Foster—Number of cows, 9; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells to A. Wiggins. Jersey and Durham grades.
- A. Rhimes—Number of cows, 10; condition, good; feed, hay, ensilage, ground oats and bran; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Retails. Jerseys and Jersey and Durham grades.
- Ed Morgan—Number of cows, 16; condition, good; feed, hay, stover, ensilage, corn and bran; stables, good and clean; light, fair; ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Battle Creek creamery. Durham and Jersey grades.
- L. E. Seville—Number of cows, 7; condition, good; feed, hay, ensilage and bran; stables, good and clean; light, good; ventilation, fair; yard, dry and clean, good drainage; water, well. Retails. Jersey grades.
- Austin & Reed—Number of cows, 16; condition, good and clean; feed, hay, ensilage, bran, ground corn and oats; stables, good and clean; light, fair; ventilation, good; yard, dry and clean, good drainage; water, well. Retails. Jerseys and Jersey grades.
- O. M. Smith—Number of cows, 18; condition, good and clean; feed, hay, stover, ground corn, oats and bran; stables, good and clean; light and ventilation, good; yard, dry and clean, fair drainage; water, well. Retails. Jersey and Durham grades.
- F. A. Finley—Number of cows, 12; condition, good; feed, hay, stover, ensilage, bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Battle Creek creamery. Jerseys and Jersey and Durham grades.
- W. Betterly—Number of cows, 12; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean; light, good; ventilation, fair; yard, dry and clean, good drainage; water, well. Retails. Jerseys and Jersey grades.
- C. J. Weatherall—Number of cows, 5; condition, good and clean; feed, hay, stover, bran, ground corn and oats; stables, fair and fairly clean; light, fair; ventilation, good; yard, dry and clean, fair drainage; water, well. Retails. Jerseys and Jersey grades.

Goguac Lake Sanitarium Farm—Number of cows, 20; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well and lake. Milk used at Battle Creek Sanitarium. Jersey and Durham grades.

W. J. Foster—Number of cows, 12; condition, good and clean; feed, stover, ensilage, barley bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; wafer, well. Sells to A. Wiggins. Jersey and Durham grades.

- W. L. Miller—Number of cows, 27; condition, good; feed, stover, ensilage, bran, ground corn and oats; stables, good and clean; light and ventilation, fair; yard, dry and clean, good drainage; water, well and lake. Sells to Battle Creek Sanitarium. Durham grades.
- C. J. Miller—Number of cows, 22; condition, good; feed, stover, ensilage, bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Battle Creek creamery. Durham grades.
- J. Rolfe—Number of cows, 20; condition, good; feed, stover, cornmeal and bran; stables, good and clean; light and ventilation, poor; yard, dry and clean, good drainage; water, well. Sells to Battle Creek Sanitarium. Durham and Holstein grades.
- J. P. Reasoner—Number of cows, 17; condition, good and clean; feed, hay, millett, stover, bran and cornmeal; stables, good and clean; light and ventilation, poor; yard, dry and clean, fair drainage; water, creek. Sells to Battle Creek Sanitarium. Jersey, Durham and Holstein grades.
- G. W. Davidson—Number of cows, 14; condition, good; feed, shredded corn fodder and cornmeal; stables, close but clean; light, fair; ventilation, poor; yard, dry and fairly clean, fair drainage; water, well. Sells milk to Battle Creek creamery. Durham grades.
- E. J. Addison—Number of cows, 12; condition, good; feed, hay, stover, bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, good and clean, good drainage; water, well. Sells milk to Brown's creamery. Durham grades.
- W. H. Porter—Number of cows, 13; condition, good; feed, hay, stover, bran, ground corn and oats; stables, low but clean; light and ventilation, fair; yard, dry and clean, good drainage; water, well. Sells to Brown's creamery. Durham grades.

Geo. Bucklin—Number of cows, 13; condition, good; feed, stover, bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, fairly dry and clean, fair drainage; water, well. Sells to Brown's creamery. Durham grades.

- S. E. Hiscock—Number of cows, 11; condition, good; feed, stover, cornmeal and bran; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Brown's creamery. Durham grades.
- J. Bradstreet—Number of cows, 12; condition, good and clean; feed, hay, bran, ground corn and oats; stables, temporary but clean; light, fair; ventilation, good; yard, dry, manure allowed to accumulate against stable; water, well. Sells to Brown's creamery. Durham grades.
- J. R. Raymond—Number of cows, 13; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Brown's creamery. Durham grades.

James McNeal—Number of cows, 16; condition, good; feed, hay, stover, corn and bran; stables, fair and fairly clean; light, poor; ventilation, good; yard, dry and clean, drainage good; water, well. Sells to Brown's creamery. Durham grades.

- A. V. Owen—Number of cows, 10; condition, good; feed, hay, stover, cornmeal and bran; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Durham grades.
- J. Van Tuyle—Number of cows, 14; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Brown's creamery. Durham grades.
- R. B. Cowles—Number of cows, 26; condition, good; feed, hay, ensilage, ground corn and oats and bran; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Battle Creek creamery. Jersey and Durham grades.
- E. Cowles—Number of cows, 16; condition, good; feed, hay. ensilage, bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Battle Creek creamery. Jersey and Durham grades.
- W. H. Barber—Number of cows, 33; condition, good and clean; feed, hay, stover, bran, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells milk to Battle Creek creamery. Jersey and Durham grades.
- G. W. Count—Number of cows, 17; condition, good; feed, hay, stover, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Jersey and Durham grades.
- E. Gleason—Number of cows, 11; condition, good; feed, hay, corn fodder, ground corn and oats; stables, good and fairly clean; light, fair; ventilation, good; yard, dry and clean, good drainage; water, well. Durham and Jersey grades.
- W. T. Sackrider—Number of cows, 35; condition, good; feed, hay, ensilage, ground corn and oats; stables, good and clean; light and ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Battle Creek creamery. Jersey and Durham grades.
- G. A. Craut—Number of cows. 24; condition, good; feed, hay, corn fodder, bran, ground corn and oats; stables, good and clean; light and ventilation, fair; yard, fairly dry and clean, fair drainage; water, well. Sells to Battle Creek Sanitarium. Durham and Jersey grades.
- W. D. Wyman—Number of cows, 14; condition, good; feed, hay, stover, ground corn and oats; stables, good and fairly clean; light, fair; ventilation, good; yard, fairly clean, good drainage; water, well. Durham grades.

I. Willis—Number of cows, 36; condition, good; feed, hay, ensilage, bran, ground corn and oats; stables, fair and fairly clean; light, fair; ventilation, good; yard, dry and clean, good drainage; water, well. Sells to Battle Creek creamery. Durham grades.

CREAMERY INSPECTION.

Calhoun County:

Brown's Creamery, Battle Creek, Mich. W. H. Brown. owner and manager. Daily receipts of milk 2,000 pounds. Condition of building, good, clean and sanitary in every particular; of apparatus, extra good and clean; of surroundings, good, with sewer drainage. Average test of milk, 4.6. Number of patrons, 30. Retails milk, cream and butter; has four wagons. Outfit consists of 1 No. 2 separator, 4 ice water tanks, capacity 80-10 gallon cans, 1 24 bottle tester, 1 10 H. P. engine, 1 15 H. P. boiler milk heater and pumps.

APIARY INSPECTION.

At Dowagiac:

Jacob Becker—Number of colonies, 32; colonies apparently healthy; flora, clover and fall flowers; yard, neat.

D. W. Sammons—Number of colonies, 20; colonies apparently healthy; flora, clover and fall flowers; yard, neat.

ABSTRACT OF LAWS.

The trade is warned that the following is but a brief synopsis of the Michigan Food Laws. The Digest and Rulings cover but a portion of the food and drink products affected by the statutes. Every article of food and drink comes within the law's regulations, and dealers are advised to apply to the Department for a copy of the complete laws and inform themselves fully.

IN GENERAL.

No person shall within this State manufacture for sale, have in his possession with intent to sell, offer or expose for sale, or sell, any article of food or drink which is adulterated.

The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the future delivery of any of the articles, products, goods, wares or merchandise embraced within the provisions of the act is deemed a sale.

Under the statute a dealer is liable for selling an adulterated article, although he may have no knowledge that the same is adulterated.

A guarantee of purity received from the manufacturer or jobber does not relieve a person handling adulterated goods from liability.

AN ARTICLE

shall be deemed to be adulterated:

- 1. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength or purity;
- 2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it;
- 3. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it;
 - 4. If it is in imitation of, or is sold under the name of another article;
- 5. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted or rotten animal or vegetable substance or article-whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal;
- 6. If it is colored, coated, polished or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is, except in the case of pure butter, which may be colored;
- 7. If it contains any added substance or ingredient which is poisonous or injurious to health.

MIXTURES OR COMPOUNDS

recognized as ordinary articles or ingredients of articles of food may be sold under the following restrictions:

1. All packages containing same must bear the name and address of the manufacturer or compounder thereof:

2. They must contain nothing injurious to health;

3. They must not be sold in imitation of, or under the name of another article:

4. They must be distinctly labeled under their own distinctive name, and in a manner so as to plainly and correctly show they are a mixture

or compound;

5: A mixture or compound cannot be sold under the name of any ingredient contained therein, even though the words mixture or compound be used in connection therewith. It must be sold under an original or coin name.

Exceptions under the law are:

Buckwheat flour, coffee and lard, which may be mixed with other substances under certain restrictions and sold as buckwheat flour compound, coffee compound and lard compound.

DIGEST AND RULINGS.

Baking Powder.—All packages containing same must bear name and address of the manufacturer. Can be sold without formula, but if labeled cream of tartar, phosphate powder, etc., must be true to name.

Buckwheat Flour.—If labeled "Buckwheat Flour," must be true to name. Can be mixed with substances not injurious to health if labeled, "Buckwheat Flour Compound," in letters not less than one-half inch in length, followed with the name of the maker and the factory and the location of such factory. Any other label or printed matter upon the package shall not be in contravention of the above requirements.

Butter.—Must be made exclusively of milk or cream. May be colored with coloring matter not injurious to health. Butter factories where milk or cream is purchased of or contributed by three or more persons must register with the Department on or before April 1 of each year.

Renovated butter must be labeled as such. See ruling under head of Renovated Butter.

Candy.—Must not contain terra alba, barytes, talc, or other earthy or mineral substances, or any poisonous colors or flavors, or ingredients detrimental to health.

Catsup.—All packages containing same must bear the name and address of the manufacturer. Must contain no ingredients injurious to health.

Cheese.—Must be made exclusively of milk or cream. Only cheese made from milk from which no cream has been taken can be sold as or branded, "Full Cream Cheese," or "Full Milk Cheese." Cheese factories where milk or cream is purchased of or contributed by three or more persons must register with the Department, on or before April 1, of each year. Authorized brands bearing the words, "Michigan Full Cream Cheese," may be obtained from the Department upon payment of fee of one dollar annually.

Coffee.—If sold as such must be true to name. May be mixed with chicory, or other substances not injurious to health, if marked or labeled, "Coffee Compound,"

together with the name and address of the manufacturer or compounder, and have no other label of whatever name or designation. This applies to all packages containing such coffee whether put up for immediate delivery or for stock purposes.

Coffee Substitute.—Mixtures of cereals or other articles sold as substitute for coffee, must be sold as a mixture or compound under an original or coin name and not under the name of any ingredient contained therein. All packages containing same must bear the name and address of the manufacturer or compounder thereof.

Canned Goods.—Must bear name and address of packer. If dried before canning must be labeled, "Soaked or Bleached Goods," in letters not less than two line pica in size.

Cream of Tartar.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though it be labeled mixture or compound.

Extracts, Flavoring.—Bottles or packages containing extracts must bear the name and address of the manufacturer. Vanilla flavoring must be without artificial color. This includes all extracts of vanilla or tonka, whether mixed or simple.

Extracts of Vanilla and Tonka may be mixed and sold as "Extracts of Vanilla and Tonka," or simply "Extract of Tonka." The labeling of an extract vanilla and tonka as "Extract of Vanilla" or "Compound Extract of Vanilla," with the per cent of each ingredient contained therein, is not proper and will be considered an adulteration. It must be understood that when an extract of vanilla and tonka is labeled with both names, the type used is to be similar in style and size, and that one name is not to be given greater prominence than another. So called extracts that are not made from the fruit, berry or bean, and are made artificially, such as raspberry, strawberry, pineapple, banana, etc., are prohibited by law.

Farinaceous Goods.—Must be true to name. Barley, Hominy, Cracked or Rolled Wheat or Oats, Tapioca, and like articles, must be pure and unadulterated. If mixed or compounded with other articles, must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. All packages containing mixtures or compounds of this kind must bear the name and address of the manufacturer or compounder thereof.

Honey.—Must be pure. Cannot be mixed with glucose or other substances and sold as "Honey Compound."

Jellies, Jams, Fruit Butter, etc.—Imitation fruit jellies, jams, preserves, fruit butter or other similar compounds made or composed in whole or in part of glucose, dextrine, starch or ether substances, can be sold if uncolored, are not injurious, and are distinctly and durably labeled "Imitation Fruit Jelly, Jam, Preserves or Kruit Butter," with the name and location of manufacturer, and have no other label of whatever name.

Lard.—Imitation lard in manufacturers' package must be distinctly branded or labeled either "Lard Compound," "Adulterated Lard," or "Lard Substitute," in letters not less than one inch in length, and shall be followed with the name of the maker and factory, and the location of such factory. If kept or sold in other than manufacturers' package, the name of maker or factory is not necessary, but each and every package must be distinctly labeled "Lard Compound," "Adulterated Lard," or "Lard Substitute," printed in letters not less than one-half inch in length. This also applies to smaller quantities when put up for immediate delivery.

Liquors.—Spirituous, fermented, or malt liquors must not contain drugs or poison or ingredients deleterious or unhealthy. Persons engaged in manufacturing, rectifying or preparing same in any way must brand on each barrel, cask or vessel containing the same, the name of the person, firm or corporation manufacturing, rectifying or preparing the same, and also the words, "Pure and Without Drugs or Poison." No person shall sell at wholesale or retail any such liquor from any barrel, cask or vessel, unless the same shall have been branded and marked as afore-said.

Maple Sugar and Maple Syrup.—Must be pure and true to name. Cannot be mixed with other sugar or syrup and sold as "Maple Sugar Compound" or "Maple Syrup Compound."

Milk.—Must contain not less than 3 per cent fat and 12½ per cent solids. Milk from which cream has been removed must be labeled and sold as "Skim Milk." The sale of milk which is impure, unwholesome or adulterated, or from cows which are diseased or fed upon the refuse of a distillery or brewery, or upon any substance deleterious to the quality of the milk, such as garbage, swill, or any substance in a state of fermentation or putrefaction, or from cows kept in connection with a family in which there is infectious disease, is prohibited. The addition of coloring matter or preservatives to milk is prohibited.

Molasses.—Each barrel, cask, can, keg or pail containing molasses, syrup or glucose shall be distinctly branded or labeled with the true and appropriate name of such article. Packages containing molasses mixed with glucose shall be branded or labeled "Glucose Mixture," and the per cent in which glucose enters into its composition. All brands or labels shall be in letters of not less than one-half inch in length and shall be in a conspicuous place. Glucose and glucose mixtures shall have no other designation than herein required. Glucose mixtures must bear the name and address of the manufacturer. (See Syrup.)

Oleomargarine.—All compounds of animal or vegetable fats made in imitation or semblance of butter or calculated to be used as or for butter, must be known and designated as "Oleomargarine."

The use of the name of any breed of dairy cattle, or the use of any words or symbols commonly used in the sale of butter, is forbidden in the sale, exposure for sale or advertisement of any oleomargarine.

Proprietors of any place where eleomargarine is sold or furnished must have conspicuously placed on the walls of the room where the same is sold or furnished a white placard containing the words "Oleomargarine Sold or Used Here," printed in black ink in plain Roman letters not less than three inches in length or less than two inches in width. This applies to hotel, restaurant and boarding house keepers where eleomargarine is served.

All packages containing eleomargarine must be branded as such in ordinary bold-faced capital letters not less than five line pica in size, together with the name and address of the manufacturer and the name of each and every article or ingredient used or entering into its composition in ordinary bold-faced letters not less than pically size.

Dealers must notify purchasers at the time of selling oleomargarine by verbal notice that the same is a substitute for butter, and must also deliver to the purchaser a separate and distinct label on which shall be printed in black ink in ordinary bold-faced capital letters, not less than five line pica in size, the word "Oleomargarine," together with the name and address of the manufacturer and the name of each article used and entering into its composition in ordinary bold-faced letters not less than pica in size. This label must be delivered in addition to the label contained on the package in which said oleomargarine is wrappped for sale.

Oleomargarine must not contain artificial coloring matter.

Pancake Flours.—If containing more than one article must be sold as a mixture or compound under an original or coin name, and not under the name of any ingredient contained therein. Packages containing same must bear the name and address of the manufacturer or compounder.

Pepper.—All black pepper shall contain not more than six and one-half per cent ash or mineral matter; and shall contain not less than twenty-five per cent starch as determined by the diastase method; and shall contain not less than six-tenths of one per cent nor more than one and three-fourths per cent of volatile ether extract; and shall contain not more than ten per cent nor less than six and one-half per cent of non-volatile ether extract; and shall contain not more than sixteen per cent of crude fibre.

Prepared Mustard.—Pure mustard mixed with vinegar and spices may be sold if labeled "Prepared Mustard" and bear the name and address of the manufacturer but if any substance or substances are added to cheapen it, such as flour, etc., it will be deemed adulterated. The label proper must contain the words "Prepared

Mustard" and have no other designation than herein required. Printed matter descriptive of the goods will be allowed upon the label below the words "Prepared Mustard," or below the name and address of the manufacturer.

Renovated Butter.—All packages containing same sold, offered or exposed for sale, or in possession with intent to sell, must be labeled "Renovated Butter."

Packages put up for immediate delivery shall be covered by wrappers on which must be printed the words "Renovated Butter," in Gothic letters at least three-eighths of an inch square, and such wrappers shall contain no other words or printing thereon and said words "Renovated Butter" so printed shall not be in any manner concealed.

If packed in tubs or other receptacles the words "Renovated Butter," must be printed in Gothic letters at least three-eighths of an inch square on two sides of the same.

If uncovered or not in a case or package a placard containing said words in the same form as above described shall be attached to the mass in such a manner as to be easily seen and read by the purchaser.

Saccharine.—The use of saccharine in all food products is prohibited.

Syrups.—Syrup mixed with glucose must be distinctly branded or labeled "Glucose Mixture" or "Corn Syrup" in plain Gothic type not less than three-eighths of an inch square. It shall also have the name and percentage by weight of each ingredient contained therein plainly stamped, branded or stenciled on each package in plain Gothic letters not less than one-quarter of an inch square. Every package of syrup, either simple or mixed, shall bear the name and address of the manufacturer. It shall have no other designation or brand that represents or is the name of any article which contains a saccharine substance and all brands or labels shall be an inseparable part of the general or distinguishing label which shall be that principal and conspicuous sign under which it is sold.

Spices.—Must be pure and true to name. Cannot be mixed or compounded with any other article and sold under the name of any ingredient thereof, even though the package be labeled mixture or compound. (See pepper.)

Sweet Chocolates and Sweet Cocoas.—If containing no other substances than cocoa mass, and not to exceed 60 per cent of sugar and flavoring, will not be classed as a compound or mixture.

Vinegar.—All packages containing vinegar must be branded with the name and address of the manufacturer. All vinegars must contain not less than four per cent by weight of absolute acetic acid and must not contain any preparation of lead, copper, sulphuric acid, or ingredients injurious to health. All vinegars made by fermentation and oxidation must be branded "fermented vinegar," with the name of the fruit or substance from which the same is made, must be free from foreign substance and must contain not less than one and three-fourths per cent by weight of solids contained in the fruit or grain from which said vinegar is fermented, and not less than two and a half tenths of one per cent ash or mineral matter, the same being the product of the material from which said vinegar is manufactured. All vinegars made wholly or in part from distilled liquor must be branded "distilled vinegar," and must be free from artificial coloring matter. Only vinegar made from pure apple juice, free from foreign substances, drugs, or acids, and containing not less than one and three-fourths per cent by weight of cider vinegar solids, can be sold as apple, orchard, or cider vinegar.

COMPLAINTS.

Complaints or requests for investigation will be held in strict confidence and will receive prompt attention when addressed direct to the Department or through an inspector.

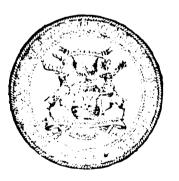
Digitized by Google

DECEMBER, 1903

BULLETIN NO. 100

STATE OF MICHIGAN

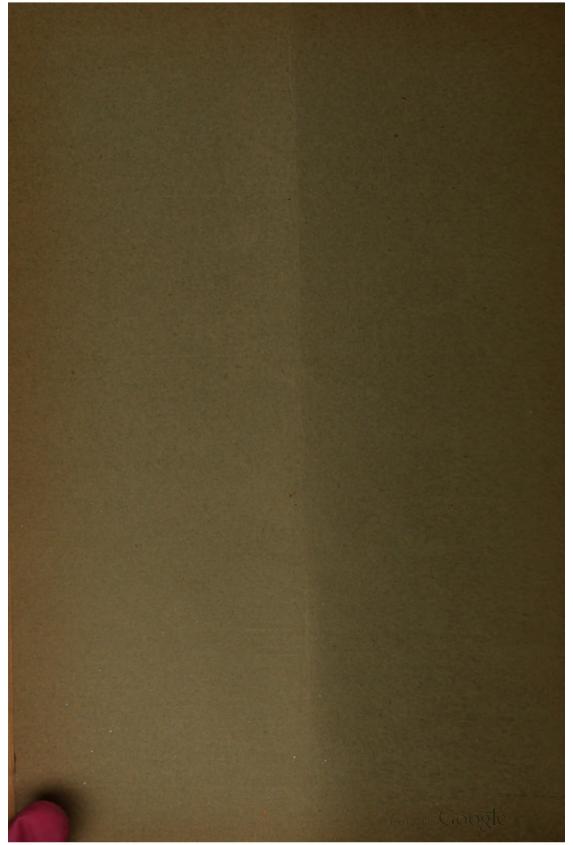
DAIRY AND FOOD DEPARTMENT

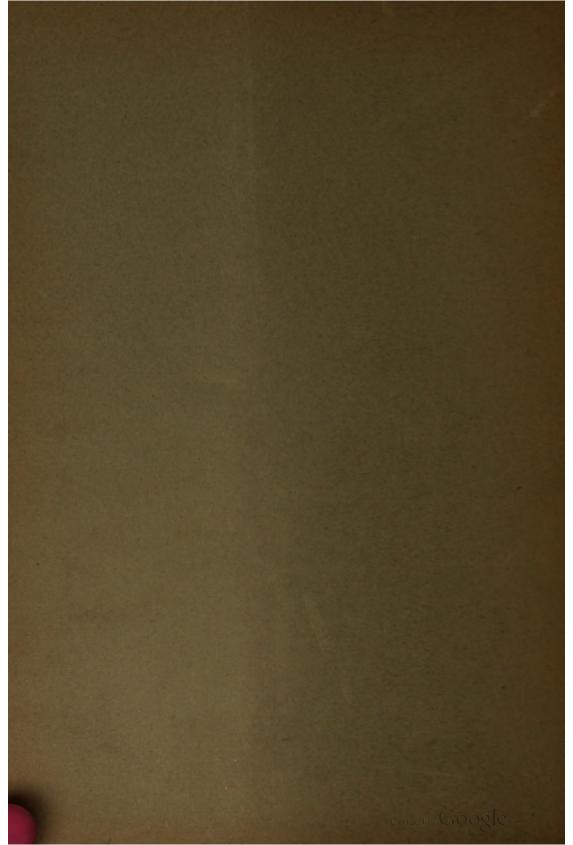


BY AUTHORITY

LANSING MICHIGAN

ROBERT SMITH PRINTING CO., STATE PRINTERS AND BINDERS
1904





2950 PA 27 1075



